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NVIDIA GeForce RTX 3070 Ti Linux Benchmarks

Benchmarks by Michael Larabel for a future article for 9 June embargo lift date for the GeFoce RTX 3070 Ti.

Automated Executive Summary

RTX 3090 had the most wins, coming in first place for 76% of the tests.

Based on the geometric mean of all complete results, the fastest (RTX 3090) was 2.963x the speed of the slowest (GTX 1080).

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

vkpeak (int32-scalar) at 9.082x
vkpeak (int32-vec4) at 7.73x
RealSR-NCNN (Scale: 4x - TAA: Yes) at 3.862x
vkpeak (fp32-vec4) at 3.755x
Batman: Arkham Knight (Resolution: 3840 x 2160 - Quality: High) at 3.457x
Basemark GPU (Renderer: Vulkan - Resolution: 3840 x 2160 - Graphics Preset: High) at 3.398x
vkpeak (fp64-vec4) at 3.301x
vkpeak (fp64-scalar) at 3.3x
vkpeak (fp16-vec4) at 3.222x
VkResample (Upscale: 2x - Precision: Single) at 3.177x.

Test Systems:

GTX 1080

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce GTX 1080 8GB, Audio: NVIDIA GP104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2060

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 2060 6GB, Audio: NVIDIA TU106 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2060 SUPER

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 2060 SUPER 8GB, Audio: NVIDIA TU106 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168,

Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2070

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: ASUS NVIDIA GeForce RTX 2070 8GB, Audio: NVIDIA TU106 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2070 SUPER

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 2070 SUPER 8GB, Audio: NVIDIA TU104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2080

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: Zotac NVIDIA GeForce RTX 2080 8GB, Audio: NVIDIA TU104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2080 SUPER

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 2080 SUPER 8GB, Audio: NVIDIA TU104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 2080 Ti

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 2080 Ti 11GB, Audio: NVIDIA TU102 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto

--enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

TITAN RTX

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA TITAN RTX 24GB, Audio: NVIDIA TU102 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3060

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: eVGA NVIDIA GeForce RTX 3060 12GB, Audio: NVIDIA Device 228e, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3060 Ti

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3060 Ti 8GB, Audio: NVIDIA GA104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3070

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3070 8GB, Audio: NVIDIA GA104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3070 Ti

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3070 Ti 8GB, Audio: NVIDIA GA104 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3080

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3080 10GB, Audio: NVIDIA GA102 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3080 Ti

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3080 Ti 12GB, Audio: NVIDIA GA102 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RTX 3090

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: NVIDIA GeForce RTX 3090 24GB, Audio: NVIDIA GA102 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.11.0-17-generic (x86_64), Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11, Display Driver: NVIDIA 465.31, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.116, Vulkan: 1.2.168, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie

--enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RX 6700 XT

RX 6800

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: AMD Radeon RX 6700/6700 XT / 6800M 12GB (2855/1000MHz), Audio: AMD Navi 21 HDMI Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.13.0-051300rc3daily20210525-generic (x86_64) 20210524, Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11 + Wayland, OpenGL: 4.6 Mesa 21.2.0-devel (git-b8d59e6 2021-05-27 hirsute-oibaf-ppa) (LLVM 12.0.0), Vulkan: 1.2.177, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

RX 6800 XT

Processor: AMD Ryzen 9 5900X 12-Core @ 3.70GHz (12 Cores / 24 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (3402 BIOS), Chipset: AMD Starship/Matisse, Memory: 16GB, Disk: 1000GB Sabrent Rocket 4.0 Plus + 2000GB, Graphics: AMD Radeon RX 6800/6800 XT / 6900 16GB (2575/1000MHz), Audio: AMD Navi 21 HDMI Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 21.04, Kernel: 5.13.0-051300rc3daily20210525-generic (x86_64) 20210524, Desktop: GNOME Shell 3.38.4, Display Server: X Server 1.20.11 + Wayland, OpenGL: 4.6 Mesa 21.2.0-devel (git-b8d59e6 2021-05-27 hirsute-oibaf-ppa) (LLVM 12.0.0), Vulkan: 1.2.177, Compiler: GCC 10.3.0 + CUDA 11.3, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-gDeRY6/gcc-10-10.3.0/debian/tmp-gcn/usr, hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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 Full AMD retpoline IBPB: conditional IBRS_FW STIBP: always-on RSB filling + srbds: Not affected + tsx_async_abort: Not affected

NVIDIA GeForce RTX 3070 Ti Linux Benchmarks

Phoronix Test Suite

	GTX 1080	RTX 2060	RTX 2060 SUPER	RTX 2070	RTX 2070 SUPER	RTX 2080	RTX 2080 SUPER	RTX 2080 Ti	TITAN RTX	RTX 3060	RTX 3060 Ti	RTX 3070	RTX 3070 Ti	RTX 3080	RTX 3080 Ti	RTX 3090	RX 6700 XT	RX 6800	RX 6800 XT
Batman: Arkham Knight - 3840 x 2160 - High	**45.36**	51.02	61.99	62.46	70.38	72.59	78.60	100.65	107.02	57.79	90.55	100.62	101.41	135.70	146.91	**156.79**	86.83	86.71	130.92
Normalized	28.93%	32.54%	39.54%	39.84%	44.89%	46.3%	50.13%	64.19%	68.26%	36.86%	57.75%	64.18%	64.68%	86.55%	93.7%	100%	55.38%	55.3%	83.5%
Standard Deviation	0.3%	0.4%	1%	0.8%	0.7%	0.6%	0.5%	0.8%	0.7%	0.6%	0.3%	0.2%	0.4%	1.1%	0.8%	1%	0.1%	0.5%	1%
Batman: Arkham Knight - 3840 x 2160 - High (FPS/Watt	**0.343**	0.415	0.451	0.456	0.425	0.44	0.44	0.504	0.496	0.467	0.586	0.596	0.473	0.543	0.541	0.59	0.619	0.622	**0.691**
Normalized	49.64%	60.06%	65.27%	65.99%	61.51%	63.68%	63.68%	72.94%	71.78%	67.58%	84.8%	86.25%	68.45%	78.58%	78.29%	85.38%	89.58%	90.01%	100%
DiRT Rally 2.0 - 2880 x 1620 - Ultra	**55.0104 66**	55.8986 13	63.1955 57	62.9209 89	73.4009 53	77.7758 46	84.7764 56	103.864 596	107.132 894	66.1512 32	84.6961 16	95.6915 92	105.208 384	124.200 111	145.826 385	142.150 375	100.260 707	100.375 224	**146.586 451**
Normalized	37.53%	38.13%	43.11%	42.92%	50.07%	53.06%	57.83%	70.86%	73.09%	45.13%	57.78%	65.28%	71.77%	84.73%	99.48%	96.97%	68.4%	68.48%	100%
Standard Deviation	0.5%	0%	0%	0.2%	0%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.3%	0.3%	0.4%	0.1%	0.1%	0%
DiRT Rally 2.0 - 3840 x 1600 - Ultra	**46.4740 35**	47.3231 23	53.5279 25	53.4558 95	62.8363 81	66.3872 15	72.9283 07	89.6555 35	92.5988 19	56.1286 26	72.6528 90	82.5089 34	90.4417 90	107.858 470	**125.425 603**	123.940 160	84.7686 01	84.9520 19	124.708 534
Normalized	37.05%	37.73%	42.68%	42.62%	50.1%	52.93%	58.14%	71.48%	73.83%	44.75%	57.93%	65.78%	72.11%	85.99%	100%	98.82%	67.58%	67.73%	99.43%
Standard Deviation	0.1%	0%	0.1%	0.1%	0.1%	0.2%	0.2%	0%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0%
DiRT Rally 2.0 - 3840 x 1600 - Ultra (FPS/Watt	**0.306**	0.324	0.336	0.336	0.33	0.35	0.334	0.378	0.362	0.386	0.4	0.415	0.351	0.373	0.392	0.39	0.5	0.505	**0.535**
Normalized	57.2%	60.56%	62.8%	62.8%	61.68%	65.42%	62.43%	70.65%	67.66%	72.15%	74.77%	77.57%	65.61%	69.72%	73.27%	72.9%	93.46%	94.39%	100%

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F1 2020 - 3840 x 2160 - Ultra	**68**	71	80	81	96	100	110	131	134	84	111	125	134	157	165	**169**	117	117	166
Normalized	40.24%	42.01%	47.34%	47.93%	56.8%	59.17%	65.09%	77.51%	79.29%	49.7%	65.68%	73.96%	79.29%	92.9%	97.63%	100%	69.23%	69.23%	98.22%
Standard Deviation	0.8%		0.7%					0.4%	0.4%			0.5%		0.4%	0.6%	0.7%			0.6%
HITMAN 2 - 2560 x 1440 - Ultra	**63.23**	66.50	74.09	74.65	85.00	87.84	96.52	112.84	116.54	79.21	100.20	110.47	116.43	133.11	134.23	**140.74**	113.62	114.44	130.48
Normalized	44.93%	47.25%	52.64%	53.04%	60.4%	62.41%	68.58%	80.18%	82.81%	56.28%	71.2%	78.49%	82.73%	94.58%	95.37%	100%	80.73%	81.31%	92.71%
Standard Deviation	0.3%	0.2%	0.4%	0.1%	0.2%	0.3%	0.3%	1.1%	0.8%	0.1%	0.2%	0.2%	0.4%	0.4%	0.2%	1%	0.1%	0.2%	0.7%
HITMAN 2 - 3840 x 2160 - Ultra	**33.58**	35.37	40.28	40.62	47.85	50.02	55.98	67.94	70.15	43.99	58.63	66.06	70.48	85.36	91.35	**95.82**	63.94	64.16	90.44
Normalized	35.04%	36.91%	42.04%	42.39%	49.94%	52.2%	58.42%	70.9%	73.21%	45.91%	61.19%	68.94%	73.55%	89.08%	95.34%	100%	66.73%	66.96%	94.39%
Standard Deviation	0.1%	0.2%	0.3%	0.2%	0.2%	0.1%	0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.4%	0.1%	0.2%	0.1%	0.2%	0%	0.2%
Basemark GPU - Vulkan - 3840 x 2160 - High	**56.17**	64.02	76.79	77.30	85.88	89.09	98.67	123.30	132.06	77.13	103.45	113.14	130.09	163.34	181.90	**190.86**	108.98	109.55	162.14
Normalized	29.43%	33.54%	40.23%	40.5%	45%	46.68%	51.7%	64.6%	69.19%	40.41%	54.2%	59.28%	68.16%	85.58%	95.31%	100%	57.1%	57.4%	84.95%
Standard Deviation	0.2%	0%	0.1%	0.1%	0.1%	0.3%	0%	0.2%	0.2%	0%	0.1%	0.1%	0.1%	0.3%	0.2%	0.2%	0.3%	0%	0.2%
Basemark GPU - Vulkan - 3840 x 2160 - High (FPS/Watt	**0.374**	0.452	0.492	0.499	0.462	0.474	0.495	0.567	0.574	0.55	0.604	0.618	0.542	0.634	0.646	0.692	0.692	0.688	**0.776**
Normalized	48.2%	58.25%	63.4%	64.3%	59.54%	61.08%	63.79%	73.07%	73.97%	70.88%	77.84%	79.64%	69.85%	81.7%	83.25%	89.18%	89.18%	88.66%	100%

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Shadow of the Tomb Raider - 2560 x 1440 - Highest -	61.7	65.1	78.7	78.7	92.6	95.2	105.3	124.9	129.7	81.7	107.1	119.1	128.7	154.4	165.5	173.6	117.1	117.3	166.9
Normalized	35.54%	37.5%	45.33%	45.33%	53.34%	54.84%	60.66%	71.95%	74.71%	47.06%	61.69%	68.61%	74.14%	88.94%	95.33%	100%	67.45%	67.57%	96.14%
Standard Deviation	0.1%	0.6%	0.1%	0.1%	0.1%	0.1%	0.1%	0%	0%	0.1%	0.1%	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Shadow of the Tomb Raider - 2560 x 1440 - Highest - Off	0.409	0.455	0.501	0.506	0.489	0.516	0.498	0.542	0.529	0.576	0.606	0.626	0.519	0.544	0.538	0.565	0.705	0.705	0.746
Normalized	54.83%	60.99%	67.16%	67.83%	65.55%	69.17%	66.76%	72.65%	70.91%	77.21%	81.23%	83.91%	69.57%	72.92%	72.12%	75.74%	94.5%	94.5%	100%
Shadow of the Tomb Raider - 3840 x 2160 - Highest -	33.5	36.2	43.1	43.2	50.9	52.4	58.7	71.4	74.4	45	59.9	67.1	73.3	90.5	98.4	103.8	62.9	63.0	91.6
Normalized	32.27%	34.87%	41.52%	41.62%	49.04%	50.48%	56.55%	68.79%	71.68%	43.35%	57.71%	64.64%	70.62%	87.19%	94.8%	100%	60.6%	60.69%	88.25%
Standard Deviation	0.2%	0.3%	0%	0.1%	0.2%	0.2%	0%	0.1%	0.1%	%	0%	0%	0.3%	0%	0.1%	0.1%	0.1%	0.1%	0.1%
Shadow of the Tomb Raider - 3840 x 2160 - Highest - Off	0.217	0.246	0.266	0.268	0.259	0.276	0.261	0.299	0.293	0.3	0.326	0.336	0.281	0.307	0.308	0.328	0.366	0.367	0.393
Normalized	55.22%	62.6%	67.68%	68.19%	65.9%	70.23%	66.41%	76.08%	74.55%	76.34%	82.95%	85.5%	71.5%	78.12%	78.37%	83.46%	93.13%	93.38%	100%

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Strange Brigade - 3840 x 2160 - Ultra	73.0	**70.1**	82.0	82.5	95.9	99.6	110.5	136.9	146.1	88.5	119.3	131.3	149.6	183.1	204.1	**213.0**	99.9	100.1	153.5
Normalized	34.27%	32.91%	38.5%	38.73%	45.02%	46.76%	51.88%	64.27%	68.59%	41.55%	56.01%	61.64%	70.23%	85.96%	95.82%	100%	46.9%	47%	72.07%
Standard Deviation	2%	0.7%	0.5%	0.3%	0.3%	0.5%	0.2%	0.4%	0.3%	0.4%	0.4%	0.3%	0.6%	0.1%	0.4%	0.7%	0.7%	0.4%	0.6%
Unigine Heaven - 2560 x 1440 - Fullscreen - OpenGL (FPS)	92.8166	**88.2868**	102.214	102.777	122.664	125.732	141.304	171.971	178.381	98.6714	131.966	157.827	166.301	204.467	221.638	**233.371**	145.625	145.901	213.663
Normalized	39.77%	37.83%	43.8%	44.04%	52.56%	53.88%	60.55%	73.69%	76.44%	42.28%	56.55%	67.63%	71.26%	87.61%	94.97%	100%	62.4%	62.52%	91.56%
Standard Deviation	0%	0.2%	0.2%	0.1%	0.4%	0.3%	0.1%	0.2%	0.2%	0.1%	0.1%	0%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.3%
Unigine Heaven - 2560 x 1440 - Fullscreen - OpenGL (FPS/Watt	0.584	**0.58**	0.615	0.619	0.6	0.648	0.598	0.696	0.668	0.625	0.696	0.756	0.612	0.671	0.665	0.7	0.815	0.817	**0.873**
Normalized	66.9%	66.44%	70.45%	70.9%	68.73%	74.23%	68.5%	79.73%	76.52%	71.59%	79.73%	86.6%	70.1%	76.86%	76.17%	80.18%	93.36%	93.59%	100%
Unigine Heaven - 3840 x 2160 - Fullscreen - OpenGL (FPS)	35.3779	**34.7537**	42.0226	42.3758	49.5020	51.0379	56.7992	74.6490	70.9278	40.8224	56.5103	67.1129	71.4276	91.7212	101.901	**108.451**	61.5538	61.6604	93.3418
Normalized	32.62%	32.05%	38.75%	39.07%	45.64%	47.06%	52.37%	68.83%	65.4%	37.64%	52.11%	61.88%	65.86%	84.57%	93.96%	100%	56.76%	56.86%	86.07%
Standard Deviation	0.2%	0.1%	0.1%	0.1%	0.2%	0.2%	0.1%	0%	0%	0.1%	0%	0.1%	0.1%	0.1%	0.2%	0.1%	0%	0%	0%

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Unigine Heaven - 3840 x 2160 - Fullscreen - OpenGL (FPS/Watt	**0.224**	0.229	0.252	0.254	0.243	0.263	0.244	0.3	0.265	0.26	0.297	0.321	0.262	0.3	0.305	0.324	0.343	0.344	**0.38**
Normalized	58.95%	60.26%	66.32%	66.84%	63.95%	69.21%	64.21%	78.95%	69.74%	68.42%	78.16%	84.47%	68.95%	78.95%	80.26%	85.26%	90.26%	90.53%	100%
Unigine Superposition - 2560 x 1440 - Fullscreen - High - OpenGL (FPS)	45.7	**44.9**	51.5	51.3	60.9	62.6	69.5	82.8	86.7	50.3	67.4	78.7	84.4	101.9	111.4	**117.8**	72.9	73.0	106.4
Normalized	38.79%	38.12%	43.72%	43.55%	51.7%	53.14%	59%	70.29%	73.6%	42.7%	57.22%	66.81%	71.65%	86.5%	94.57%	100%	61.88%	61.97%	90.32%
Standard Deviation	0.2%	0.1%	0%	0.1%	0%	0.2%	0.1%	0.3%	0.1%	0.1%	0.1%	0%	0.1%	0%	0.1%	0.2%	0%	0.1%	0.1%
Unigine Superposition - 2560 x 1440 - Fullscreen - High - OpenGL (FPS/Watt	**0.297**	0.31	0.326	0.325	0.32	0.339	0.321	0.358	0.343	0.35	0.375	0.399	0.331	0.355	0.352	0.376	0.421	0.422	**0.45**
Normalized	66%	68.89%	72.44%	72.22%	71.11%	75.33%	71.33%	79.56%	76.22%	77.78%	83.33%	88.67%	73.56%	78.89%	78.22%	83.56%	93.56%	93.78%	100%
VkResample - 2x - Single (ms)	**29.558**	27.5592	22.409	22.778	19.507	19.452	17.543	14.835	13.584	23.169	17.975	17.546	13.554	11.296	9.661	**9.304**	26.089	25.490	18.129
Normalized	31.48%	33.72%	41.52%	40.85%	47.7%	47.83%	53.04%	62.72%	68.49%	40.16%	51.76%	53.03%	68.64%	82.37%	96.3%	100%	35.66%	36.5%	51.32%
Standard Deviation	0.5%	0.7%	0.5%	0.1%	0.1%	0.1%	0.2%	0.3%	0.5%	0%	0.1%	0.1%	0%	0.2%	2%	0.1%	0%	0.1%	0.1%
VkFFT (Benchmark Score)	**22278**	22971	30032	28847	29611	29050	30505	34265	36050	26970	33367	31993	36957	40980	45080	43677	34607	35069	**50730**
Normalized	43.91%	45.28%	59.2%	56.86%	58.37%	57.26%	60.13%	67.54%	71.06%	53.16%	65.77%	63.07%	72.85%	80.78%	88.86%	86.1%	68.22%	69.13%	100%
Standard Deviation	0.3%	1.2%	1.2%	1.2%	0.3%	1.7%	1.4%	0.7%	0.7%	1.9%	2.4%	1.7%	2.2%	2%	0.7%	2.4%	0.2%		0.3%

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VkFFT (Benchmark Score/Watt)	**276.798**	338.382	401.962	424.995	385.315	320.172	405.753	363.753	333.129	387.352	399.012	392.66	308.569	299.367	292.004	291.226	409.392	419.118	**481.762**
Normalized	57.46%	70.24%	83.44%	88.22%	79.98%	66.46%	84.22%	75.5%	69.15%	80.4%	82.82%	81.5%	64.05%	62.14%	60.61%	60.45%	84.98%	87%	100%
RealSR-NCNN - 4x - Yes (sec)	**109.025**	86.536	76.169	75.727	63.396	60.334	54.237	44.379	42.165	67.272	51.561	46.687	40.752	32.551	29.618	**28.233**	40.366	40.292	30.094
Normalized	25.9%	32.63%	37.07%	37.28%	44.53%	46.79%	52.05%	63.62%	66.96%	41.97%	54.76%	60.47%	69.28%	86.73%	95.32%	100%	69.94%	70.07%	93.82%
Standard Deviation	0.2%	0.3%	0.6%	0.7%	0.6%	0.7%	0.5%	0.5%	0.6%	0.1%	0.2%	0.2%	0.2%	0.4%	0.4%	0.2%	0.1%	0.1%	0.2%
vkpeak - fp32-scalar	9161	7301	8208	8393	9709	10841	11830	16412	17124	**6816**	9671	11527	11677	17189	19545	**20704**	12504	12530	20334
Normalized	44.25%	35.26%	39.65%	40.54%	46.89%	52.36%	57.14%	79.27%	82.71%	32.92%	46.71%	55.67%	56.4%	83.02%	94.4%	100%	60.4%	60.52%	98.21%
Standard Deviation	0.3%	0.4%	0.5%	0%	0%	0.4%	0%	0.5%	0.3%	0%	0.3%	0%	0.4%	0.9%	0.6%	0.4%	0.7%	0.1%	0.2%
vkpeak - fp32-vec4 (GFLOPS)	9153	**7294**	8204	8405	9722	10827	11826	16449	17114	9049	12805	15243	15497	22683	25829	**27391**	12465	12400	20339
Normalized	33.42%	26.63%	29.95%	30.69%	35.49%	39.53%	43.17%	60.05%	62.48%	33.04%	46.75%	55.65%	56.57%	82.81%	94.3%	100%	45.51%	45.27%	74.25%
Standard Deviation	0%	0%	0.1%	0%	0%	0%	0.4%	0.4%	0.5%	0%	0%	0.1%	0.4%	0.8%	0.3%	0%	0.1%	0.3%	0.2%
vkpeak - fp16-scalar		7305	8212	8416	9736	10787	11780	16414	17122	**6844**	9691	11531	11722	17108	19434	20641	12914	12935	**20886**
Normalized		34.97%	39.32%	40.3%	46.61%	51.65%	56.4%	78.59%	81.98%	32.77%	46.4%	55.21%	56.12%	81.91%	93.04%	98.82%	61.83%	61.93%	100%
Standard Deviation		0%	0%	0%	0%	0.4%	0.1%	0%	0.3%	0%	0%	0.1%	0.4%	0.4%	0%	0%	0%	0.2%	0%
vkpeak - fp16-vec4 (GFLOPS)		14276	16057	16358	19045	21041	23030	32033	33449	13715	19431	23116	23449	34305	39106	**41422**	12884	**12857**	20826
Normalized		34.46%	38.77%	39.49%	45.98%	50.8%	55.6%	77.33%	80.75%	33.11%	46.91%	55.81%	56.61%	82.82%	94.41%	100%	31.1%	31.04%	50.28%
Standard Deviation		0%	0%	0.4%	0%	0%	0%	0.5%	0%	0%	0%	0.1%	0.4%	0.4%	0%	0.2%	0.1%	0.2%	0.1%
vkpeak - fp64-scalar	294.91	228.04	256.42	262.16	304.48	338.69	368.49	511.77	534.59	**213.44**	302.96	361.36	365.49	531.46	604.89	647.11	420.00	422.10	**704.32**
Normalized	41.87%	32.38%	36.41%	37.22%	43.23%	48.09%	52.32%	72.66%	75.9%	30.3%	43.01%	51.31%	51.89%	75.46%	85.88%	91.88%	59.63%	59.93%	100%
Standard Deviation	0%	0%	0%	0.4%	0%	0%	0.3%	0%	0%	0%	0%	0.2%	0.1%	0%	0%	0.2%	0.4%	0%	0%

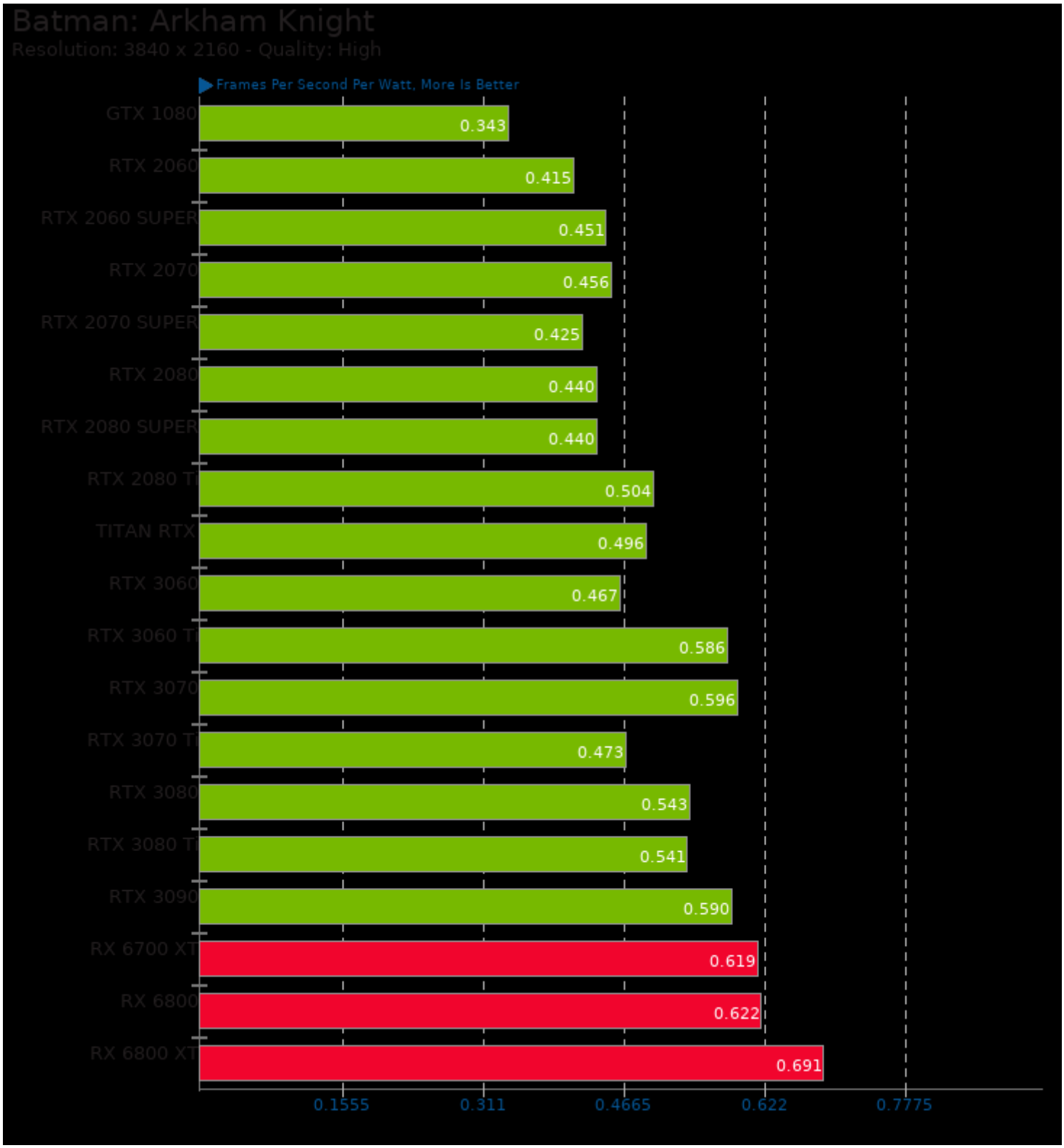
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vkpeak - fp64-vec4 (GFLOPS)	294.22	227.79	257.86	262.93	304.46	341.41	370.76	511.78	538.85	213.42	304.84	361.98	366.85	534.54	610.28	648.68	420.52	421.86	704.52
Normalized	41.76%	32.33%	36.6%	37.32%	43.22%	48.46%	52.63%	72.64%	76.48%	30.29%	43.27%	51.38%	52.07%	75.87%	86.62%	92.07%	59.69%	59.88%	100%
Standard Deviation	0.1%	0%	0%	0%		0%	0%	0%	0%	0%	0%	0.2%	0.4%	0.4%	0%	0%	0.4%	0.1%	0.1%
vkpeak - int32-scalar	3116	7258	8221	8364	9675	10864	11790	16314	17127	6807	9700	11505	11660	17016	19407	20614	22700	22832	38331
Normalized	15.12%	35.21%	39.88%	40.58%	46.93%	52.7%	57.2%	79.14%	83.08%	33.02%	47.01%	55.81%	56.57%	82.55%	94.14%	100%	11.01%	11.07%	18.58%
Standard Deviation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0.4%	0.4%	0%	0%	0%	0.1%	0.1%
vkpeak - int32-vec4 (GIOPS)	2891	7220	8181	8320	9624	10806	11736	16239	17031	6779	9650	11453	11609	16938	19322	20517	26544	26563	44643
Normalized	14.09%	35.19%	39.88%	40.55%	46.91%	52.67%	57.2%	79.15%	83.01%	33.04%	47.03%	55.82%	56.58%	82.56%	94.18%	100%	12.94%	12.95%	21.75%
Standard Deviation	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0.4%	0.4%	0%	0%	0.2%	0%	0.2%
vkpeak - int16-scalar		4799	5396	5531	6397	7125	7795	10784	11243	4500	6406	7602	7706	11241	12810	13608	6600	6598	10842
Normalized		35.27%	39.65%	40.64%	47.01%	52.36%	57.28%	79.25%	82.62%	33.07%	47.07%	55.86%	56.63%	82.61%	94.14%	100%	48.5%	48.49%	79.68%
Standard Deviation		0%	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0.2%	0.4%	0.4%	0%	0%	0%	0%	0.1%
vkpeak - int16-vec4 (GIOPS)		6372	7185	7334	8515	9435	10328	14066	14658	5985	8472	10076	10215	14466	16207	16890	6600	6602	10867
Normalized		37.73%	42.54%	43.42%	50.42%	55.86%	61.15%	83.28%	86.79%	35.44%	50.16%	59.66%	60.48%	85.65%	95.96%	100%	39.08%	39.09%	64.34%
Standard Deviation		0.5%	0%	0.4%	0%	0.3%	0.4%	0.1%	0.1%	0%	0%	0.1%	0.1%	0%	0%	0.1%	0.1%	0%	0%

NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



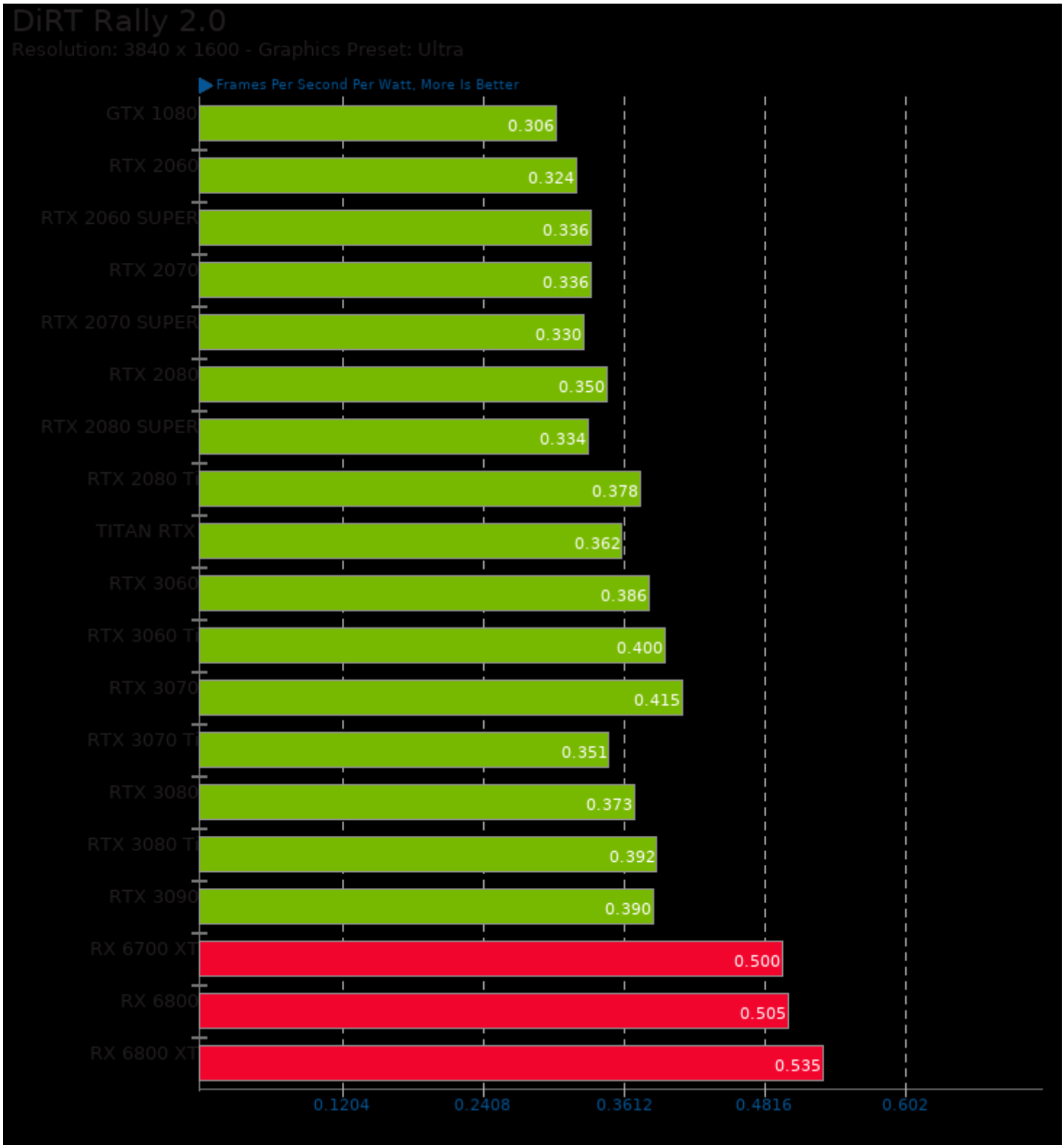
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



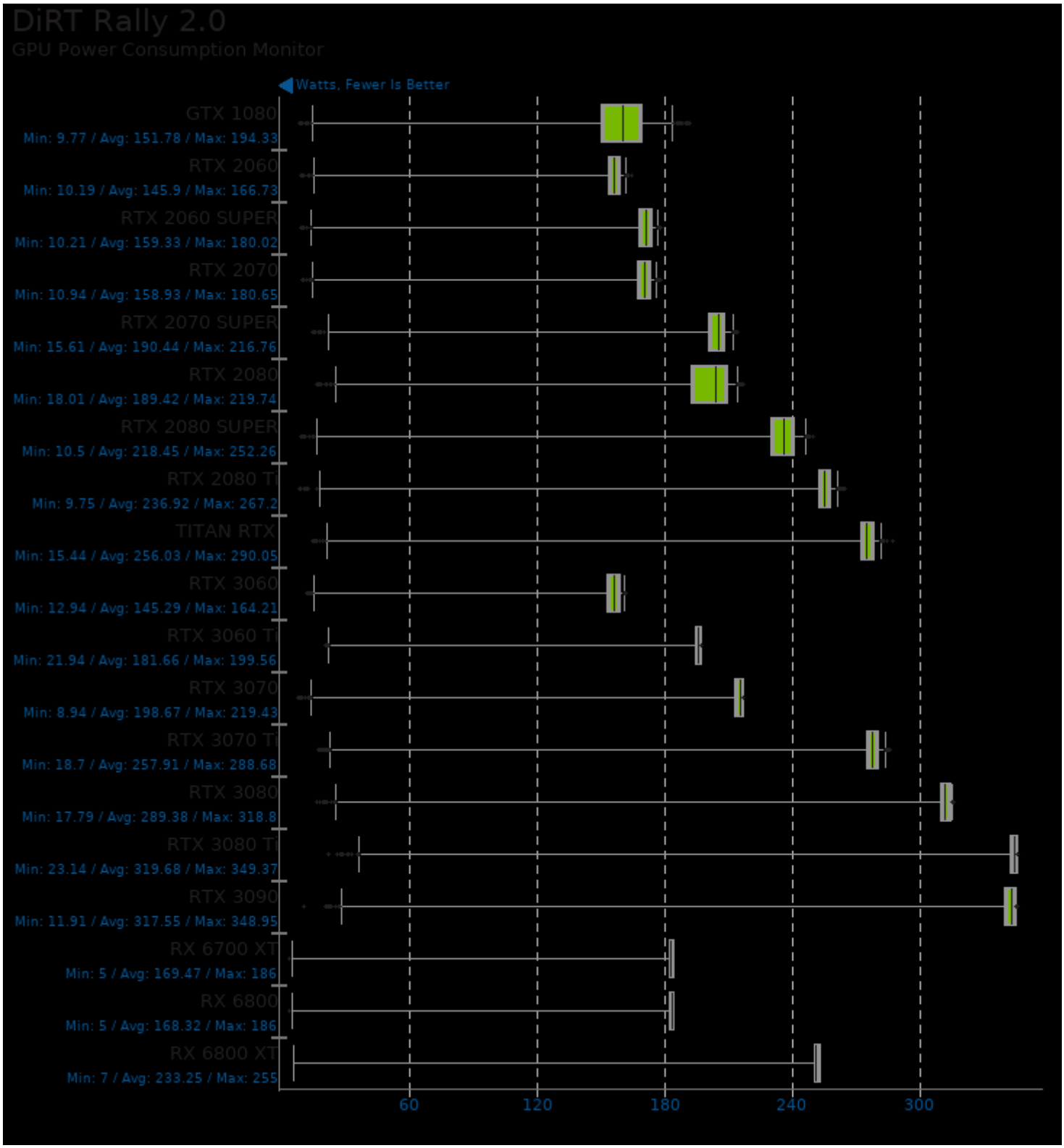
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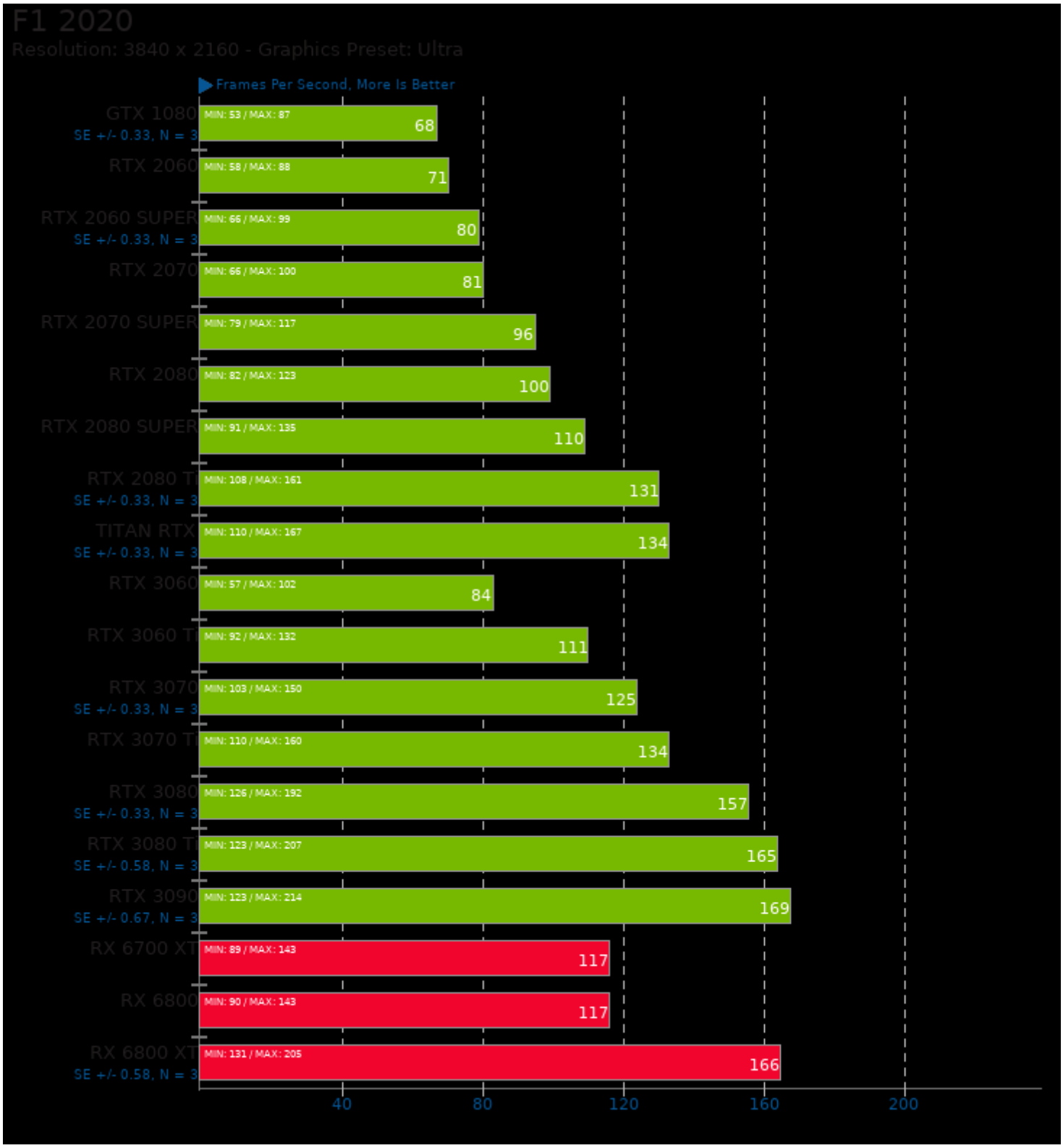
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



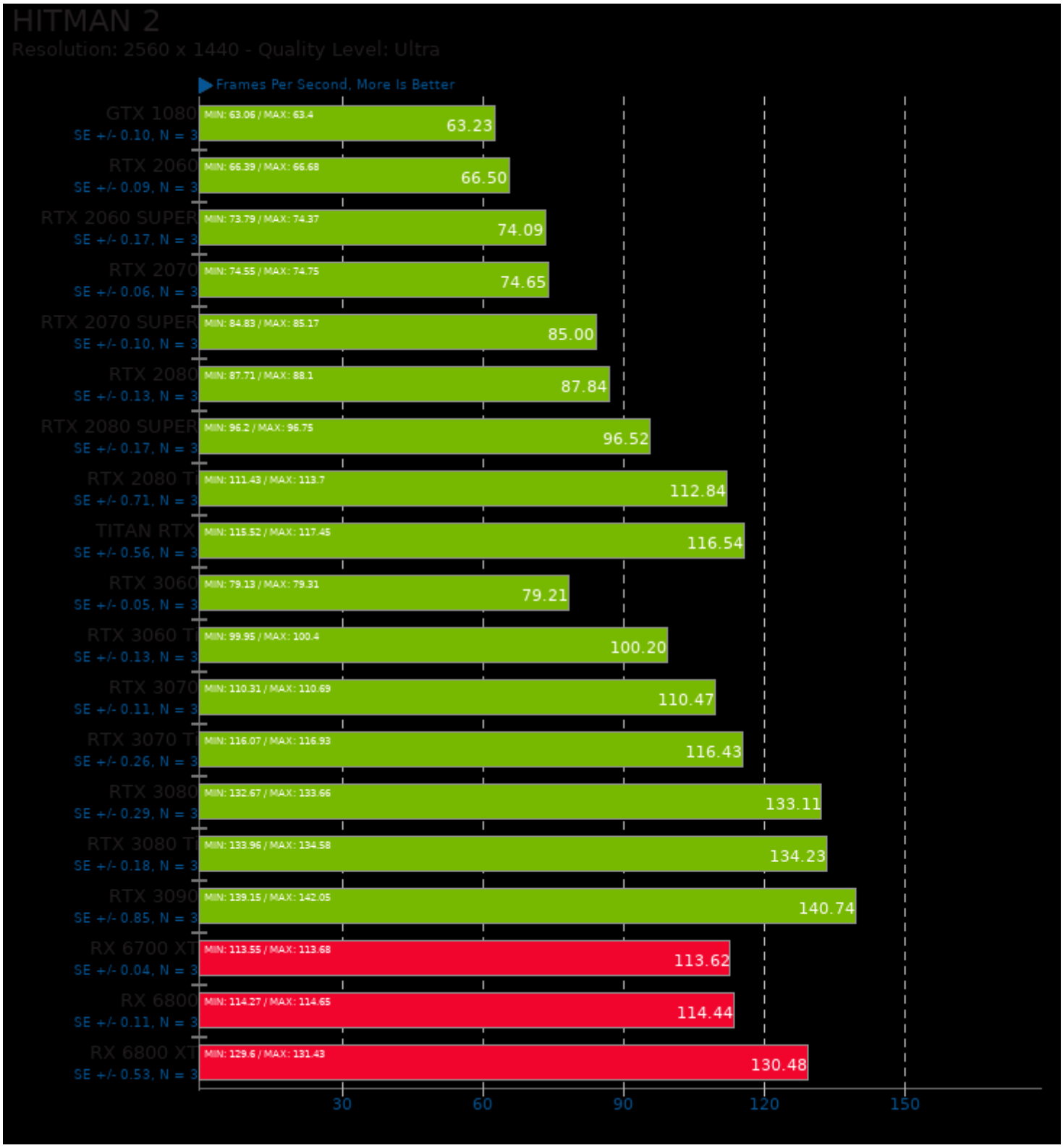
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



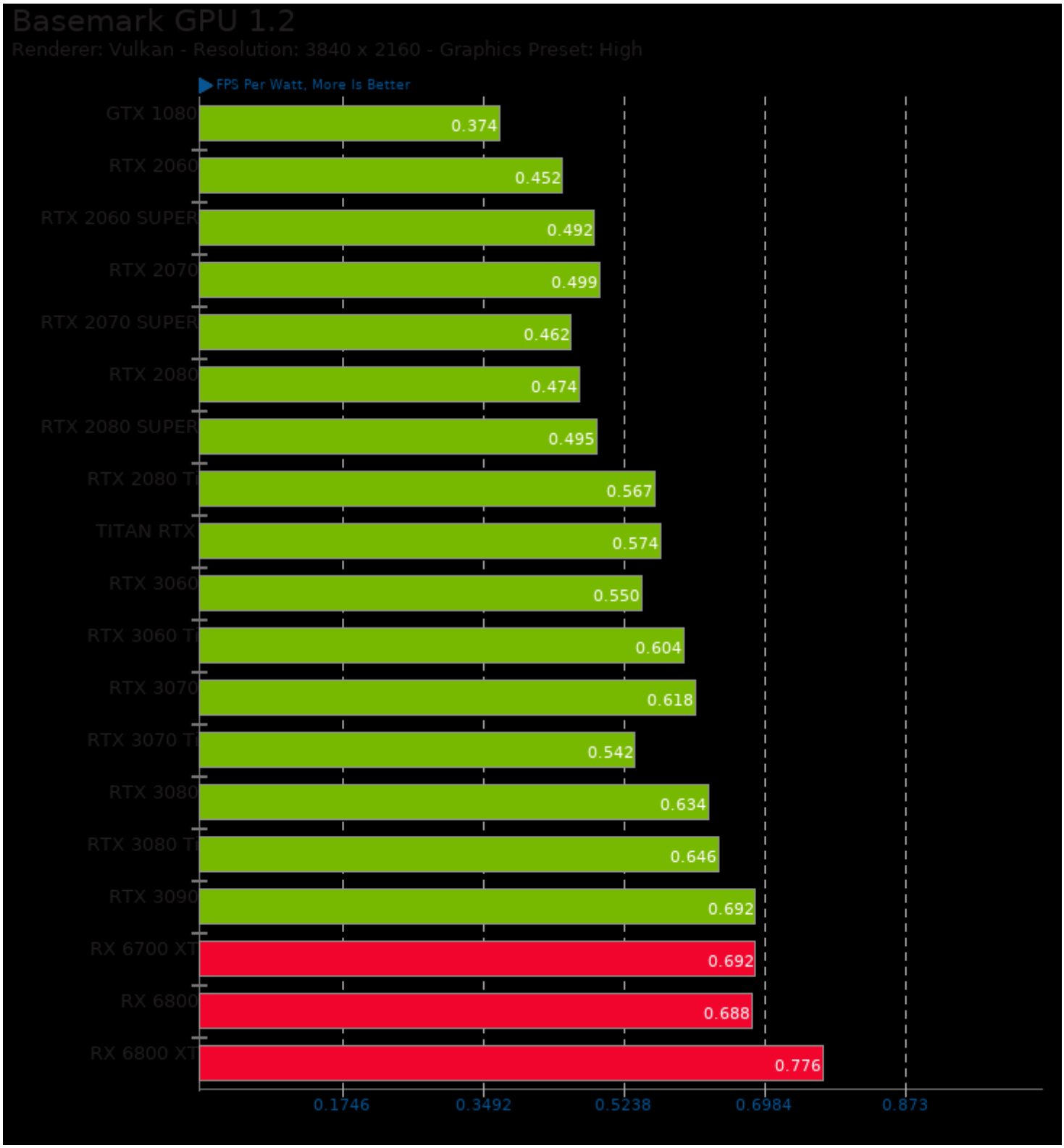
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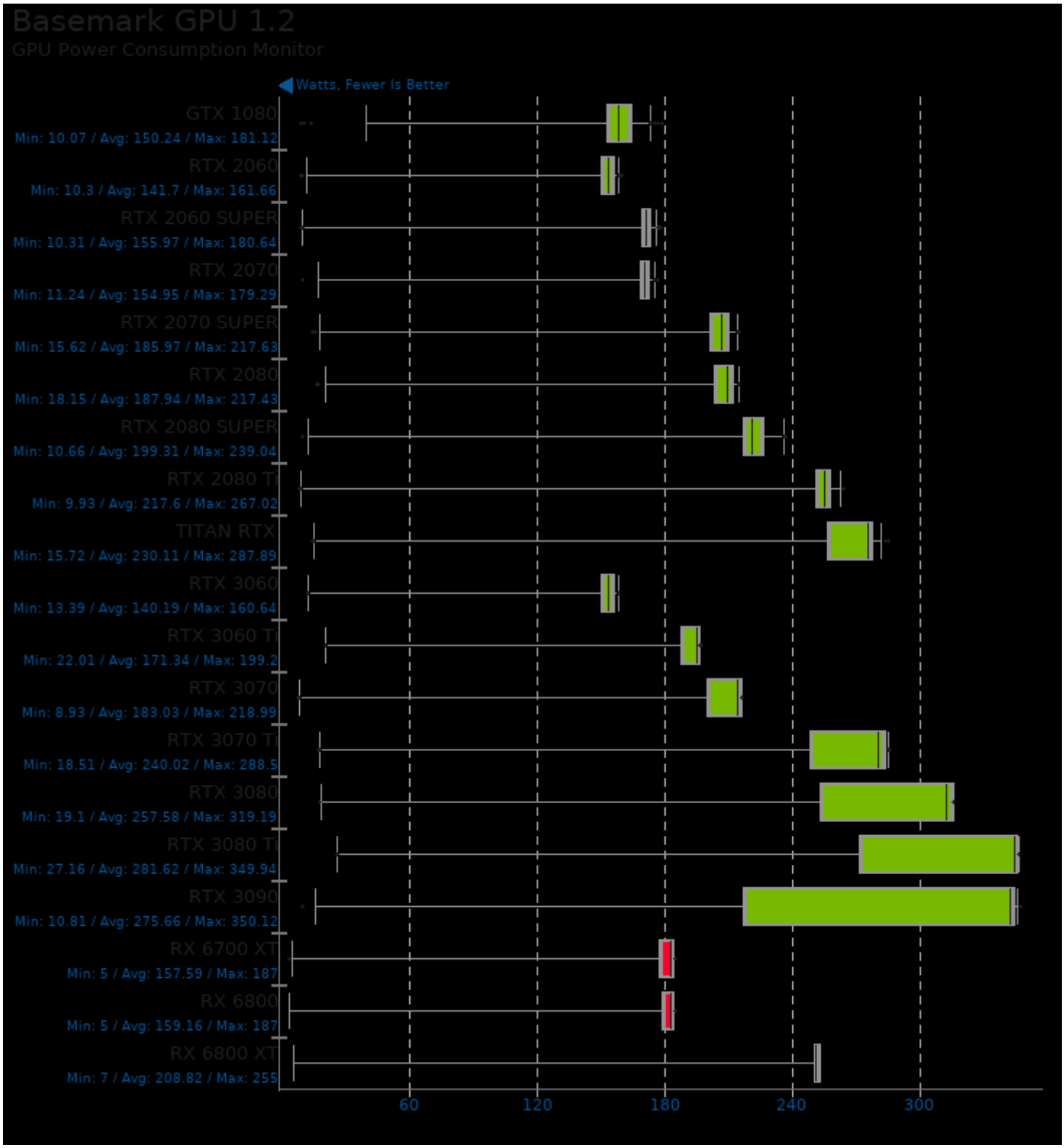
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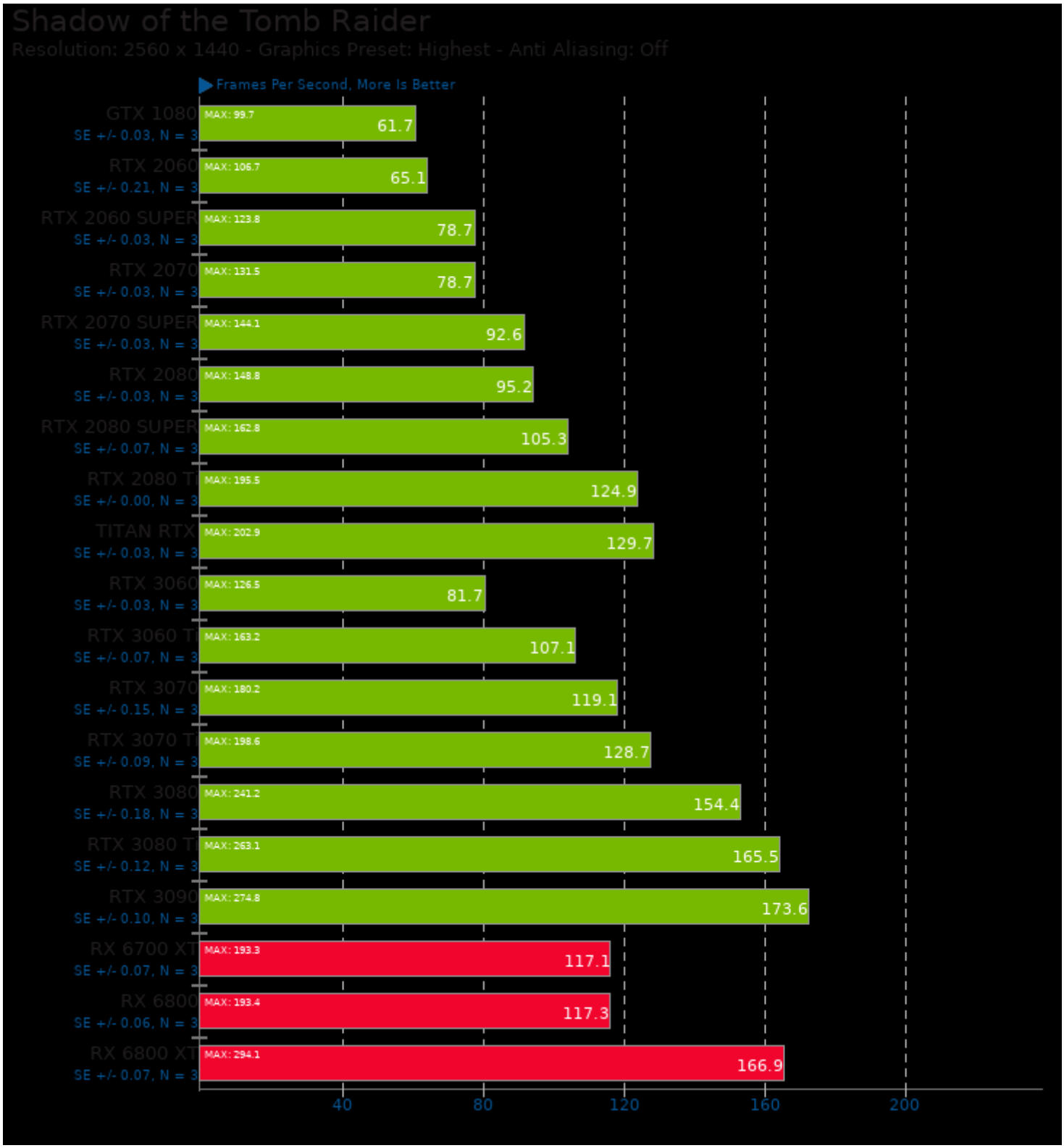
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



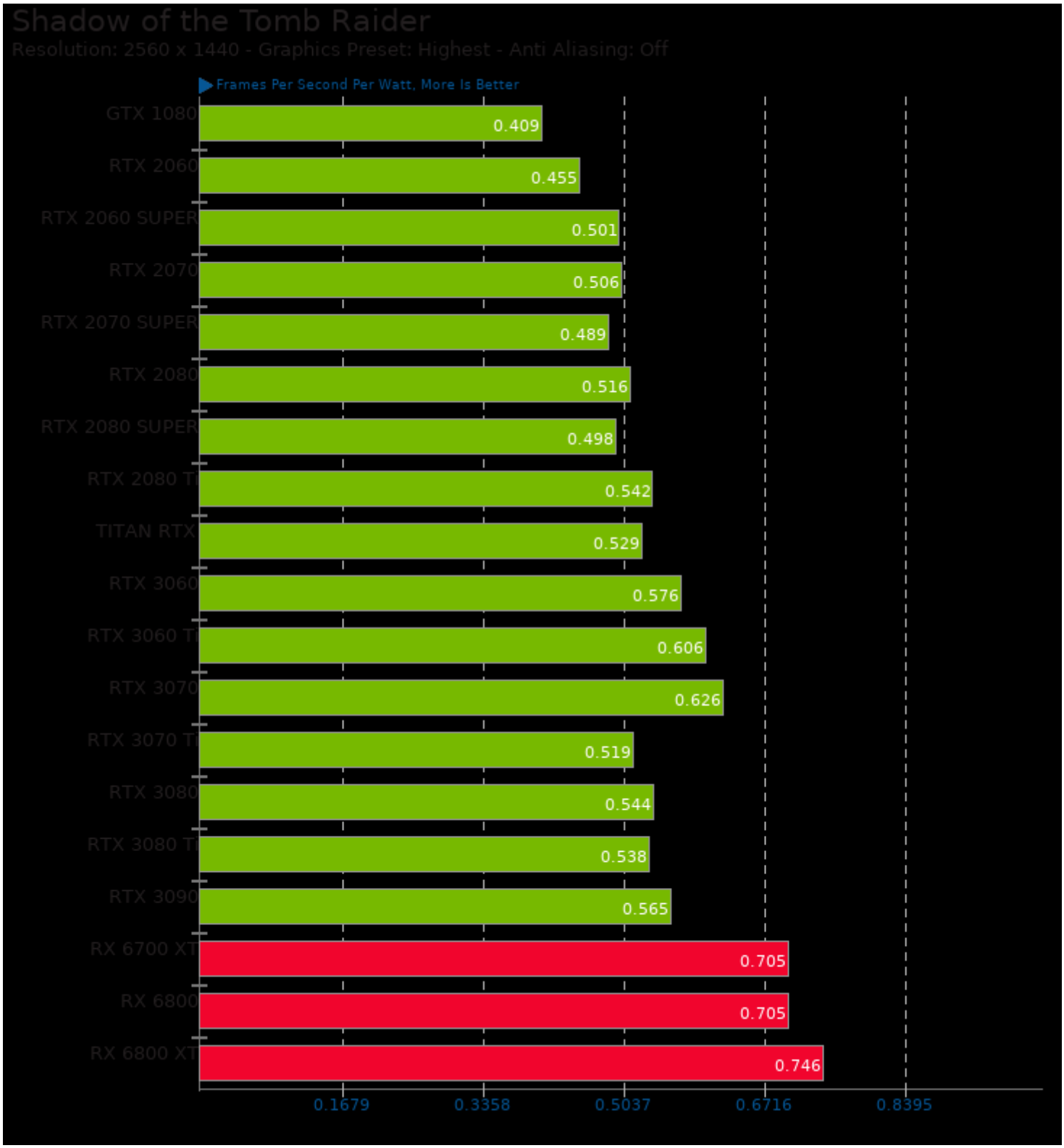
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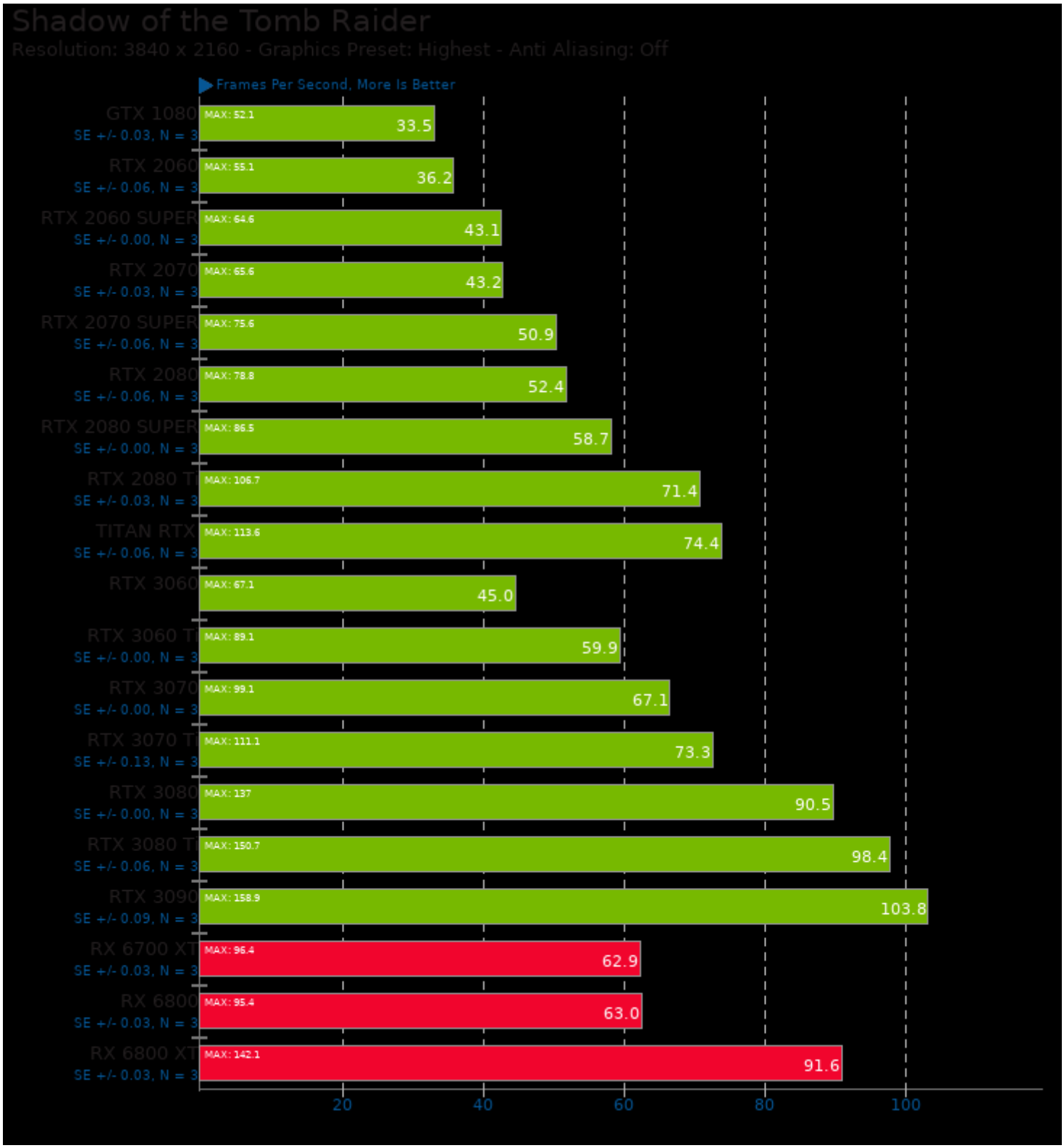
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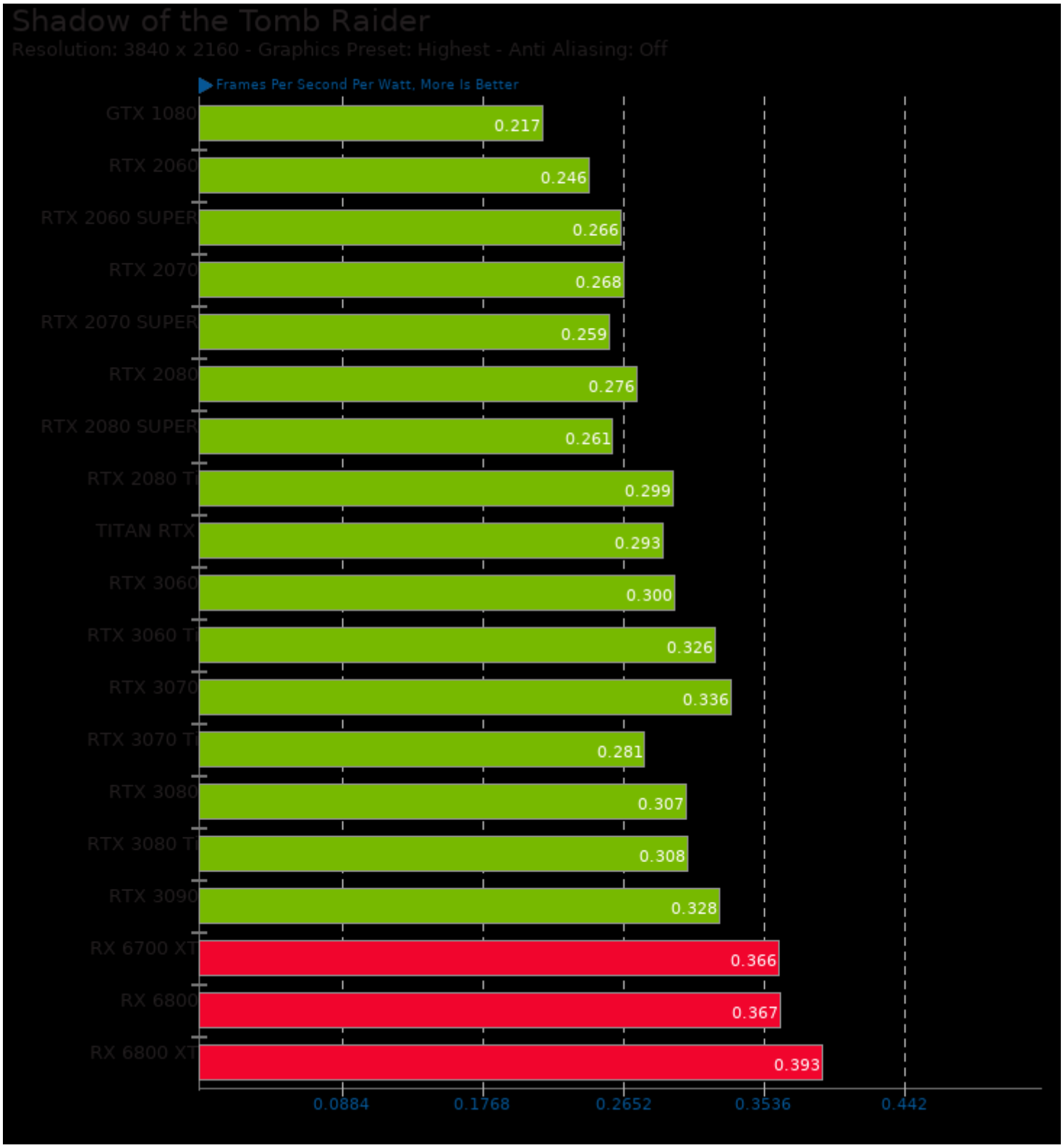
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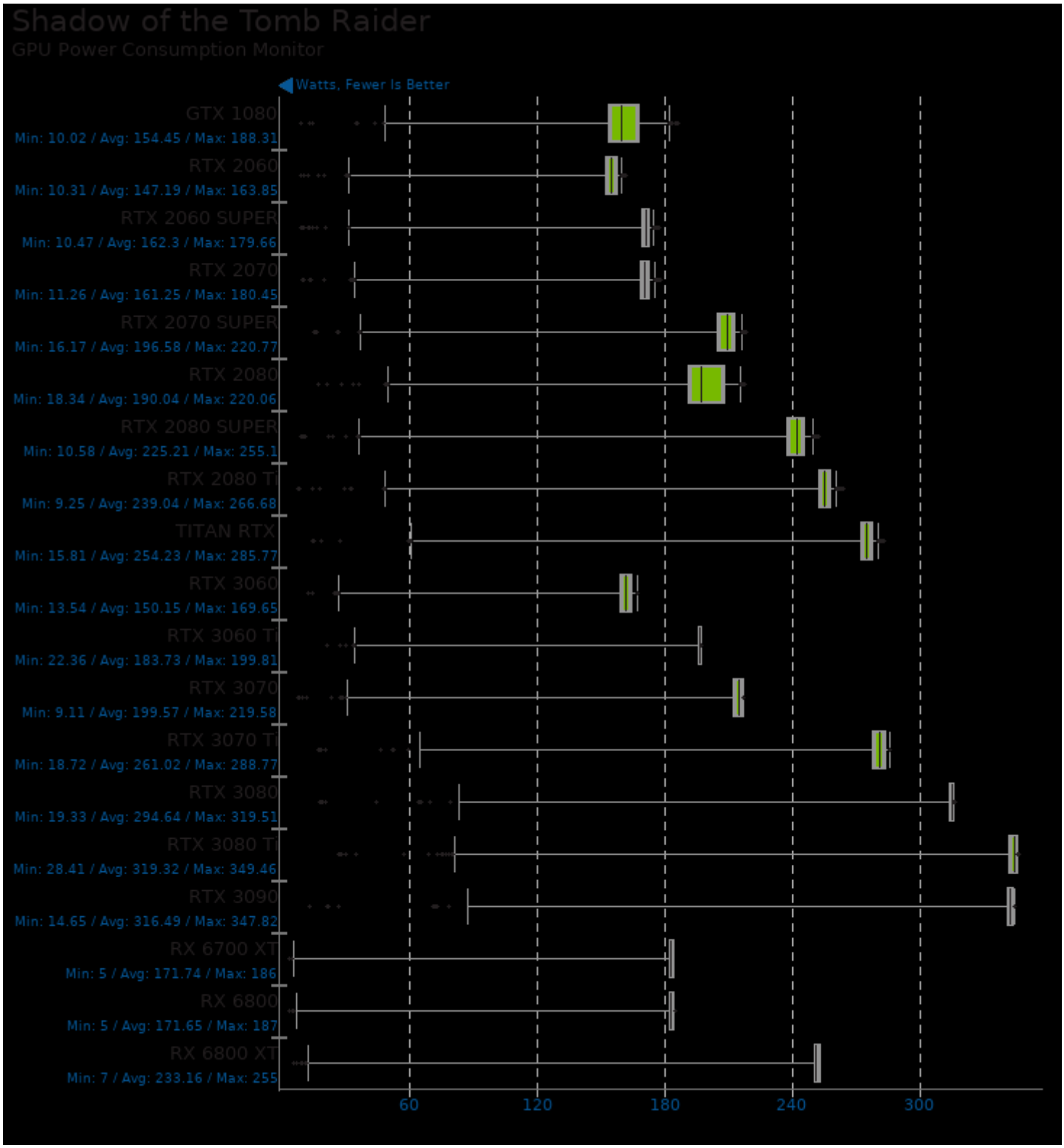
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



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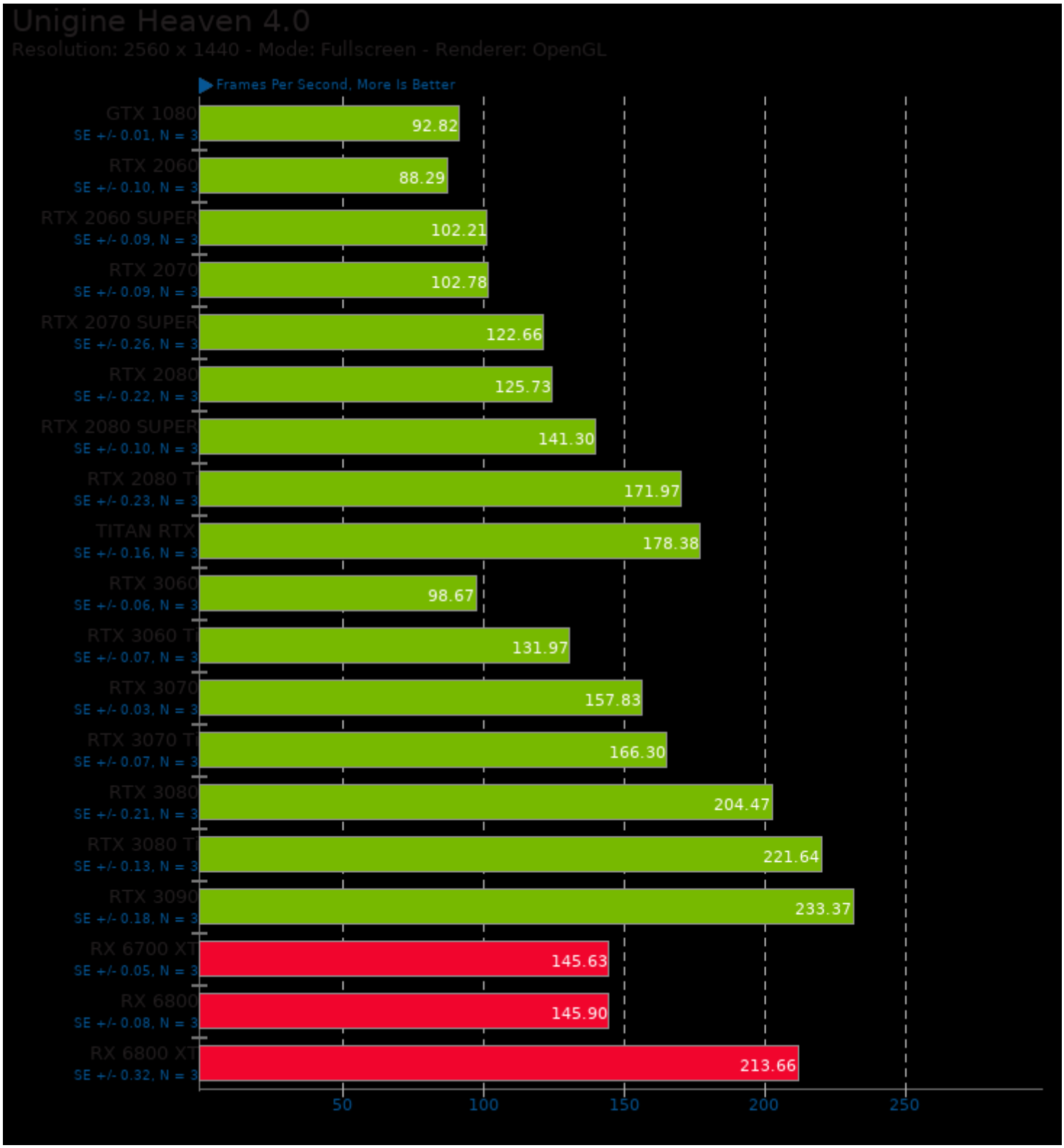
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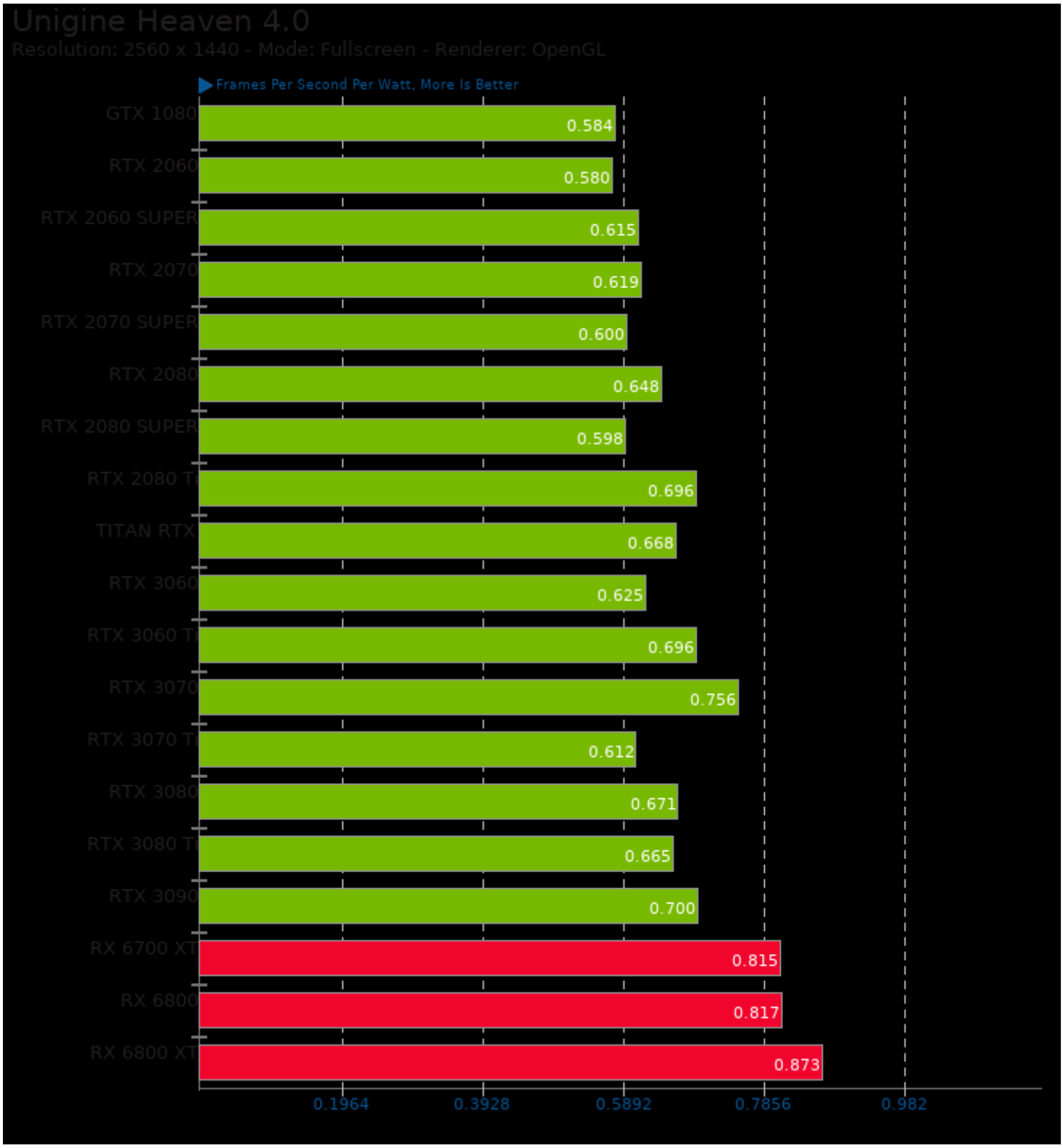
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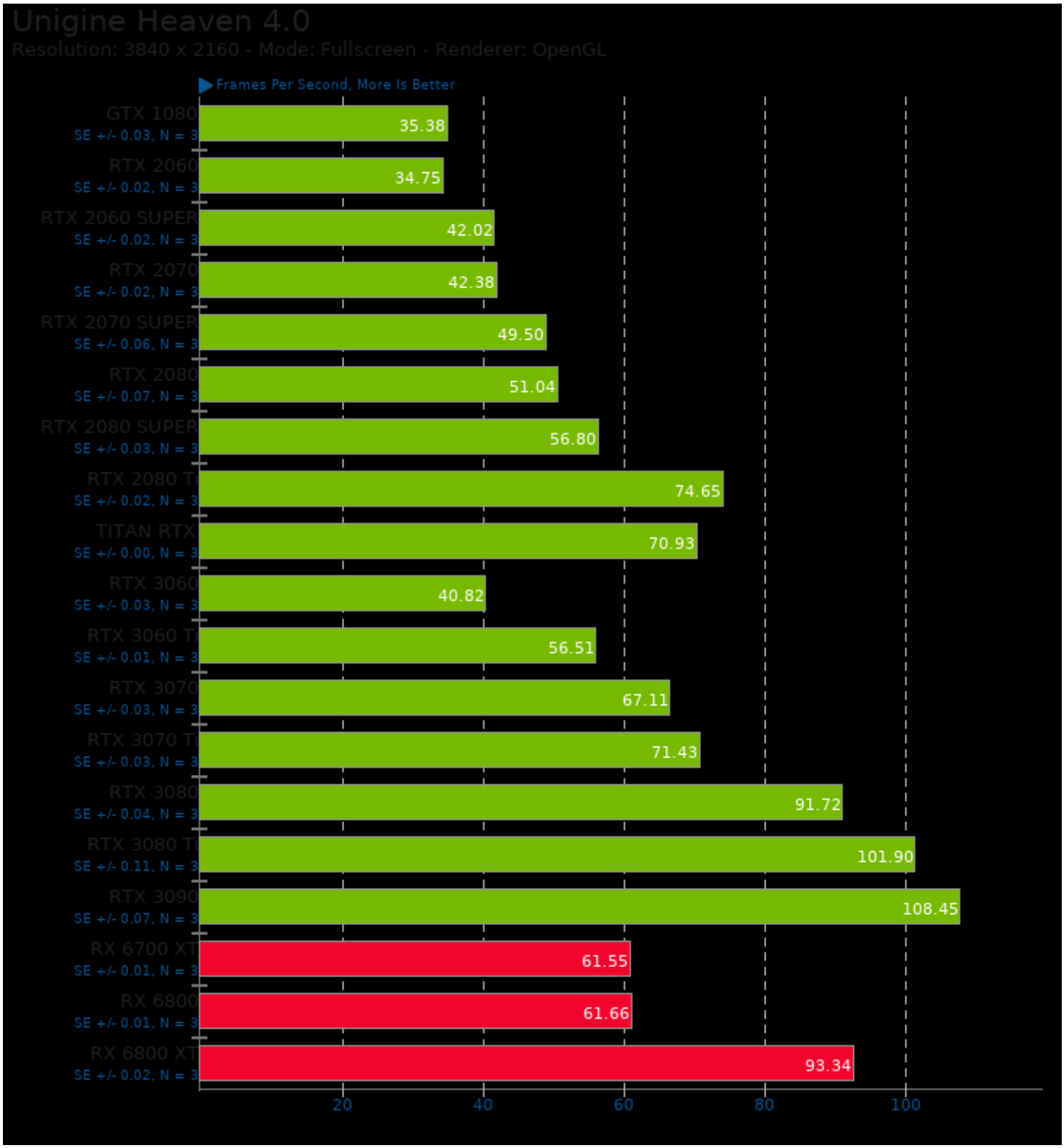
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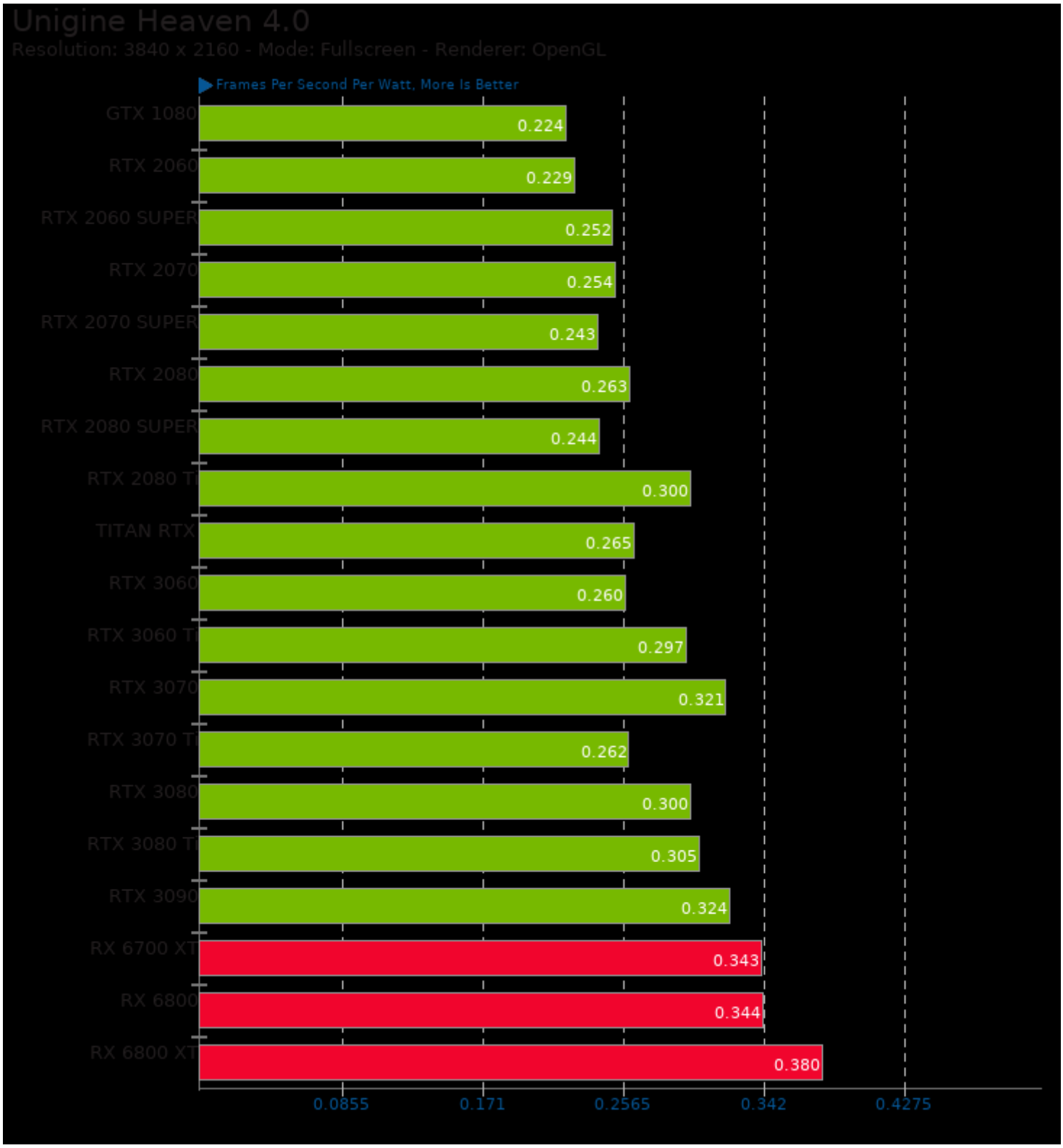
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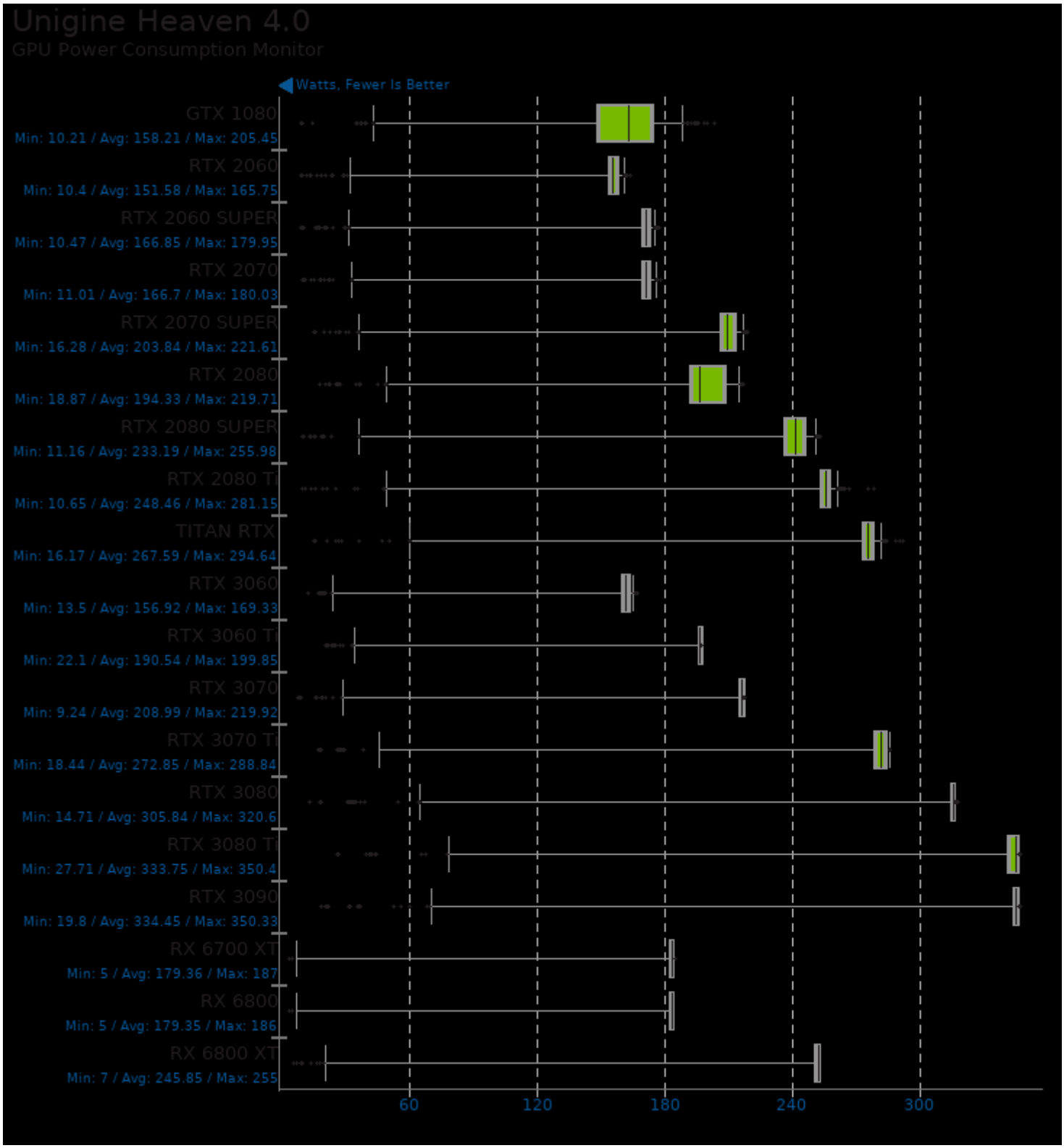
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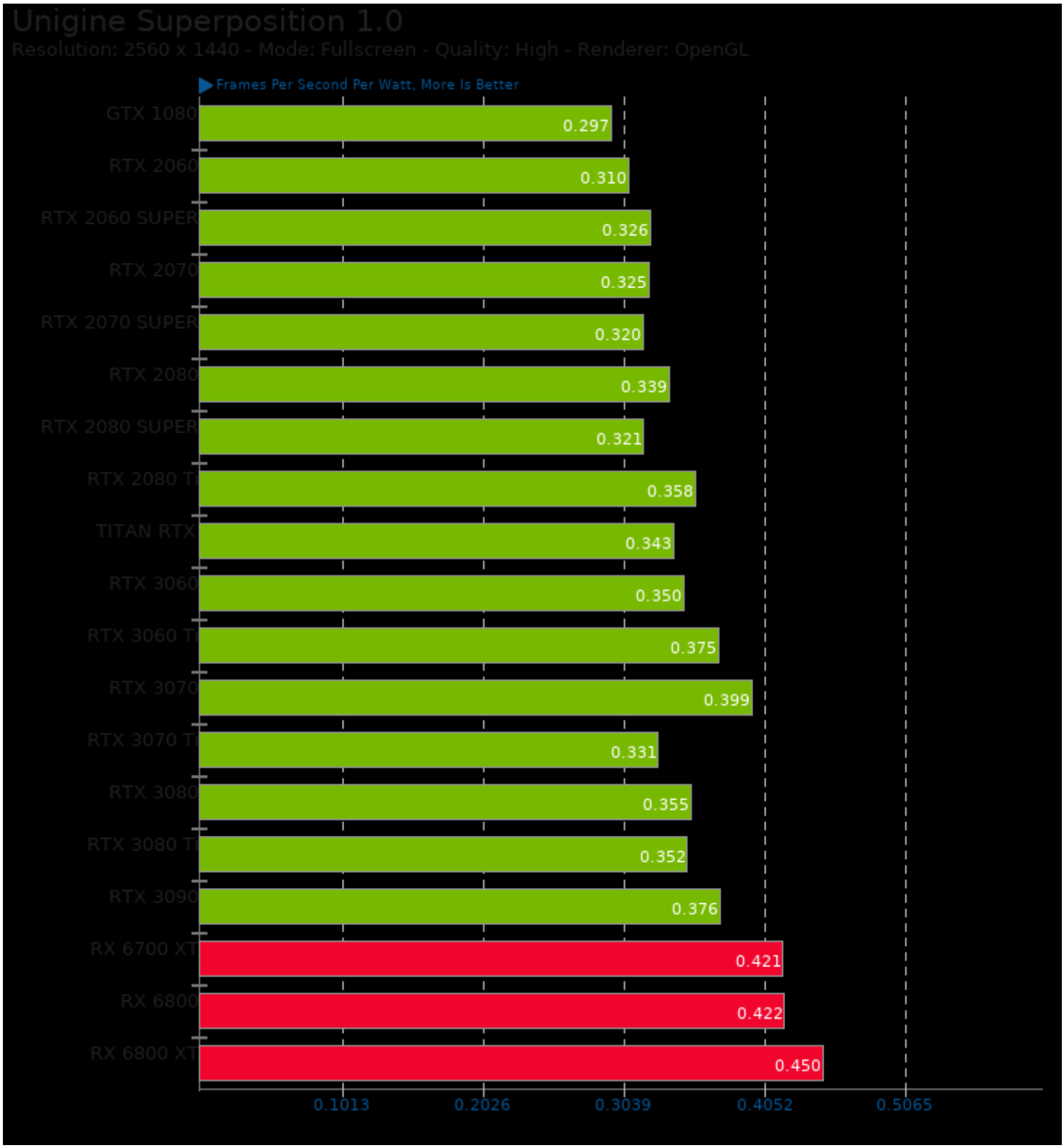
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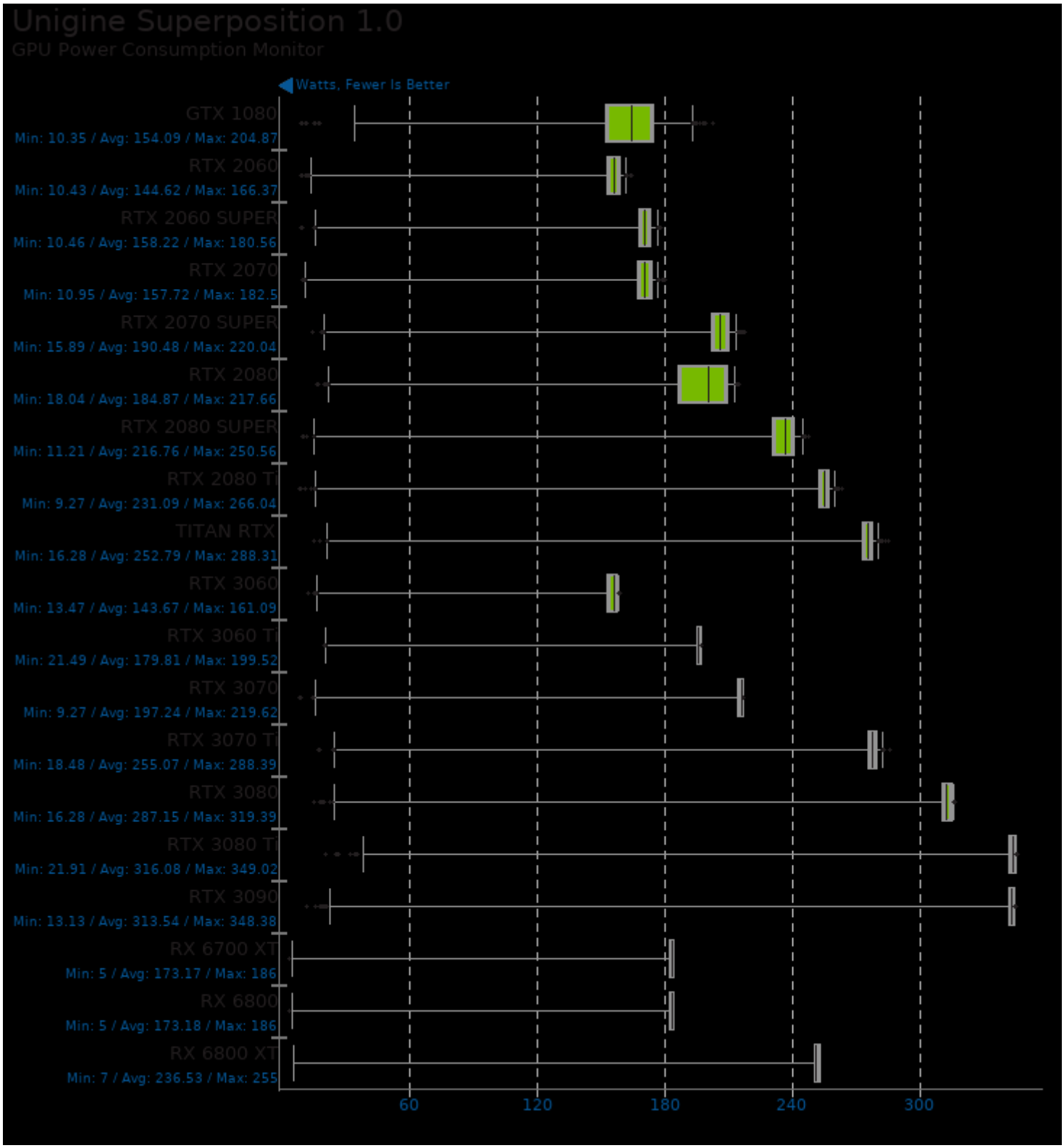
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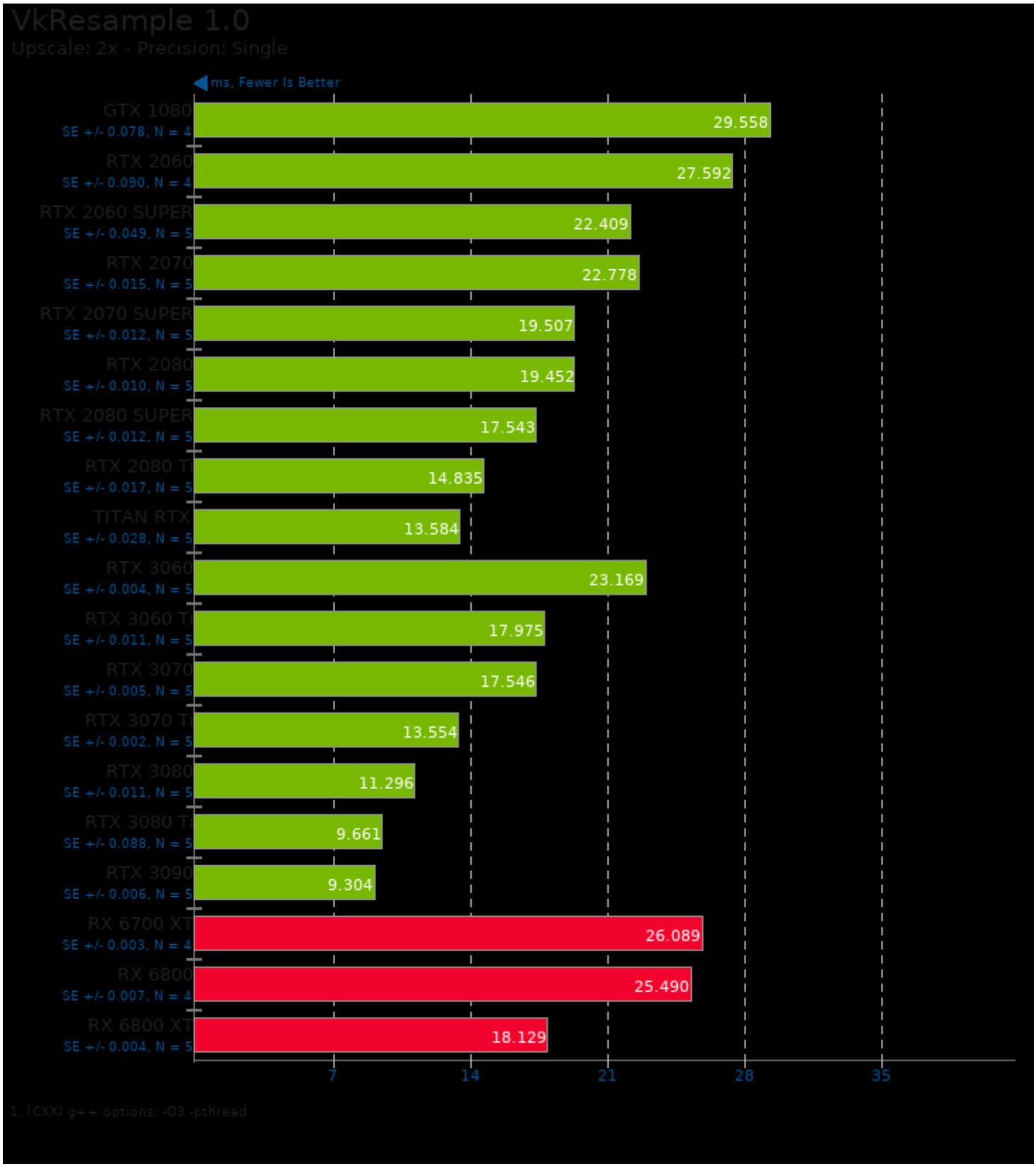
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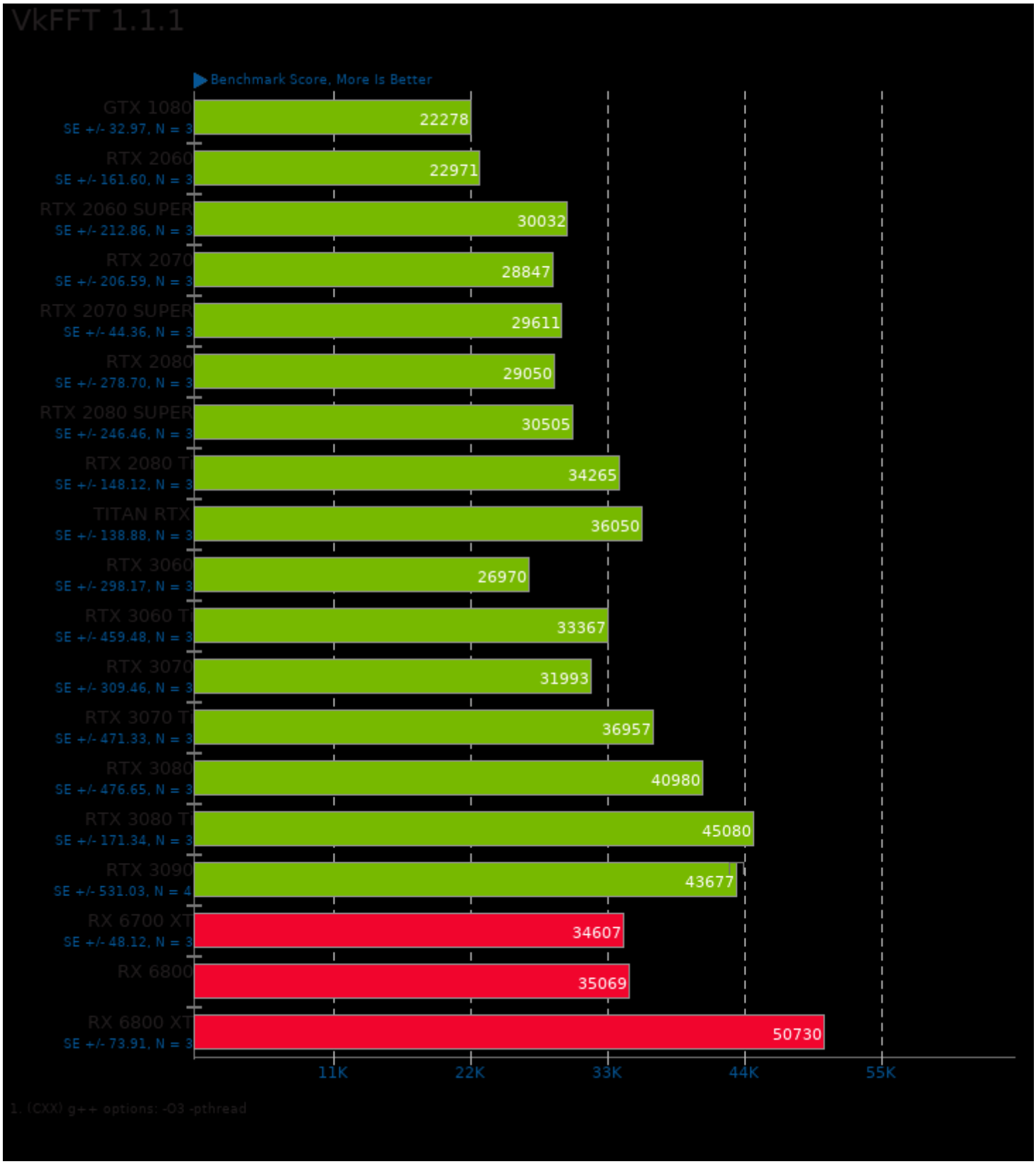
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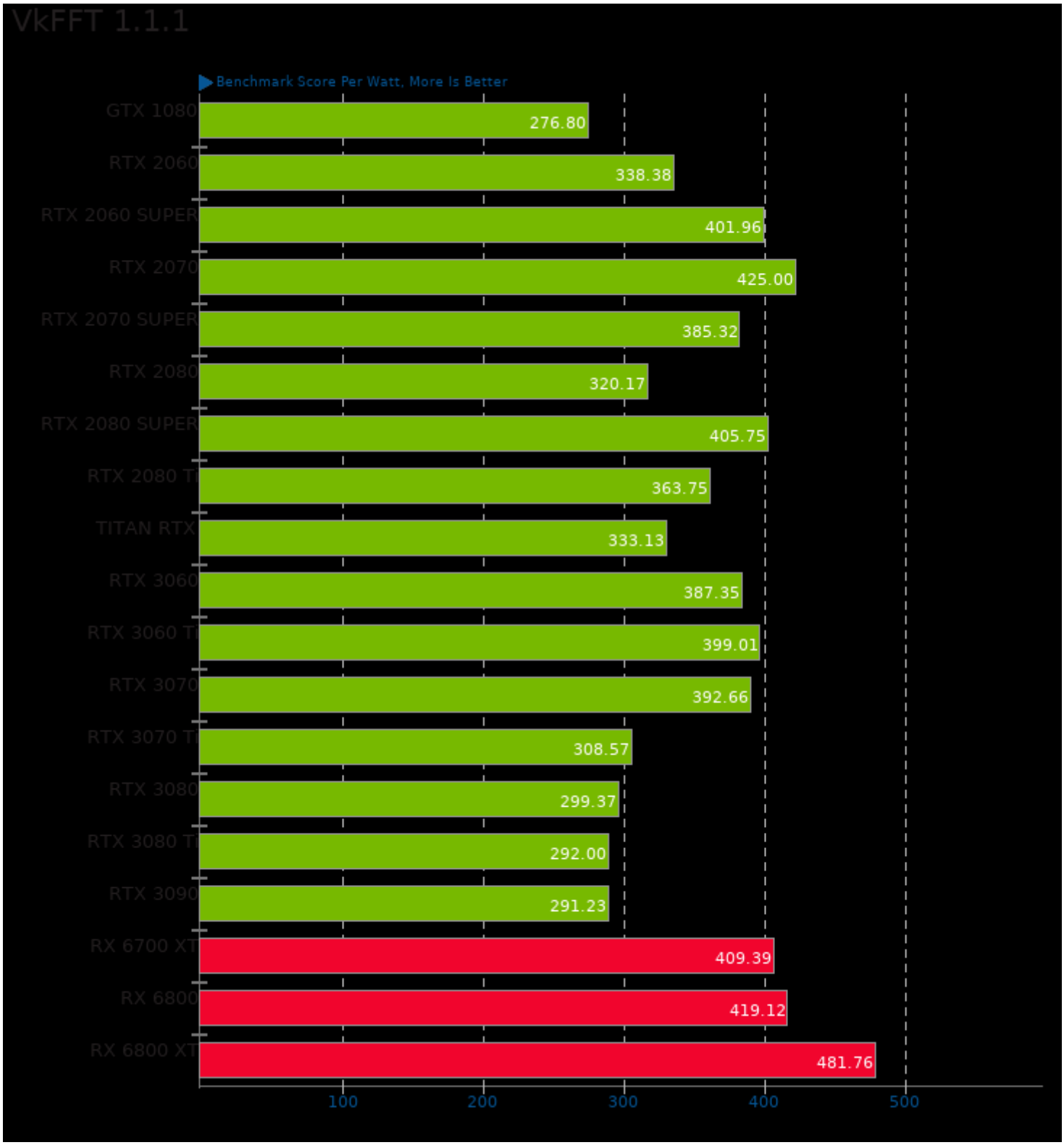
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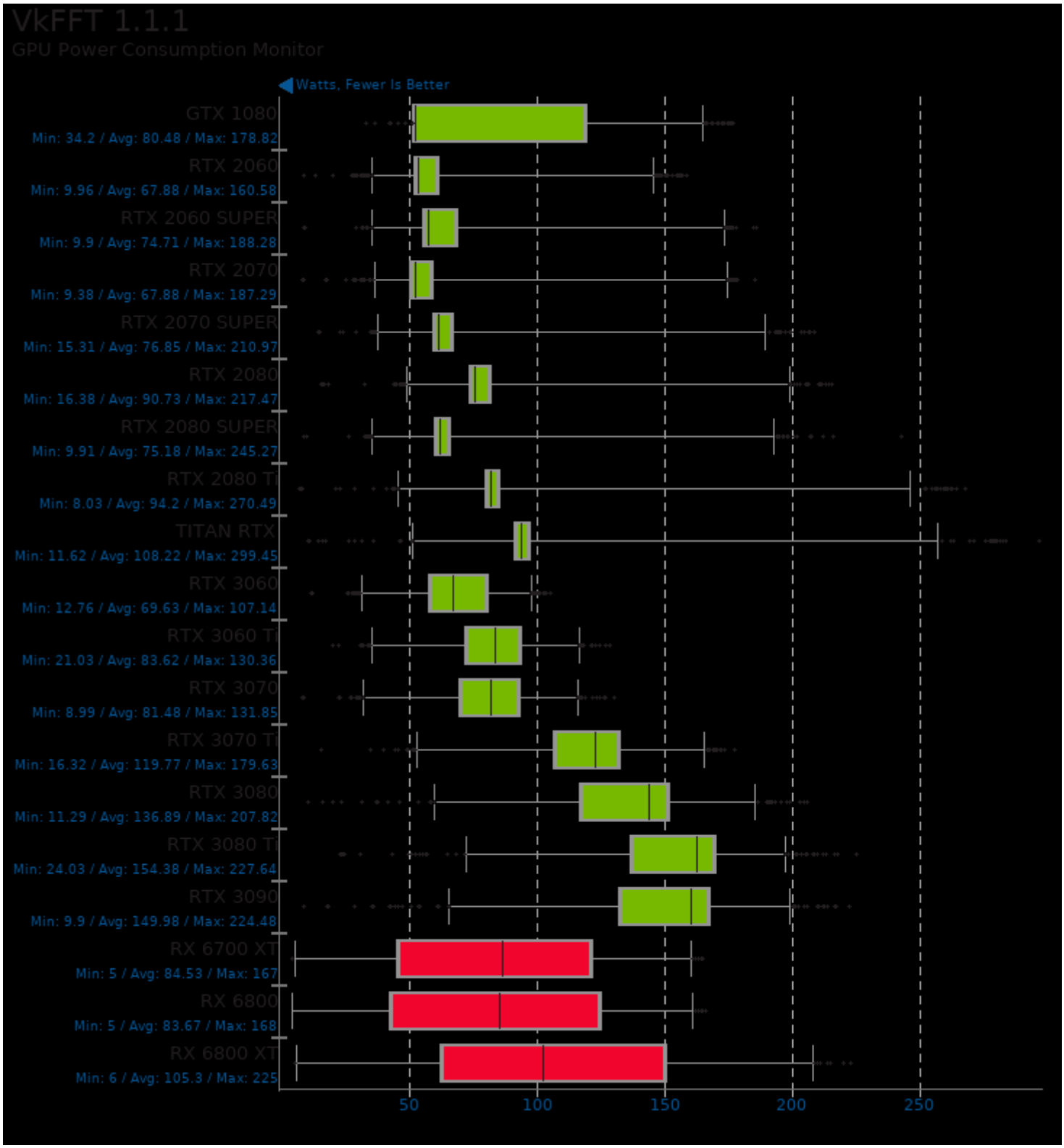
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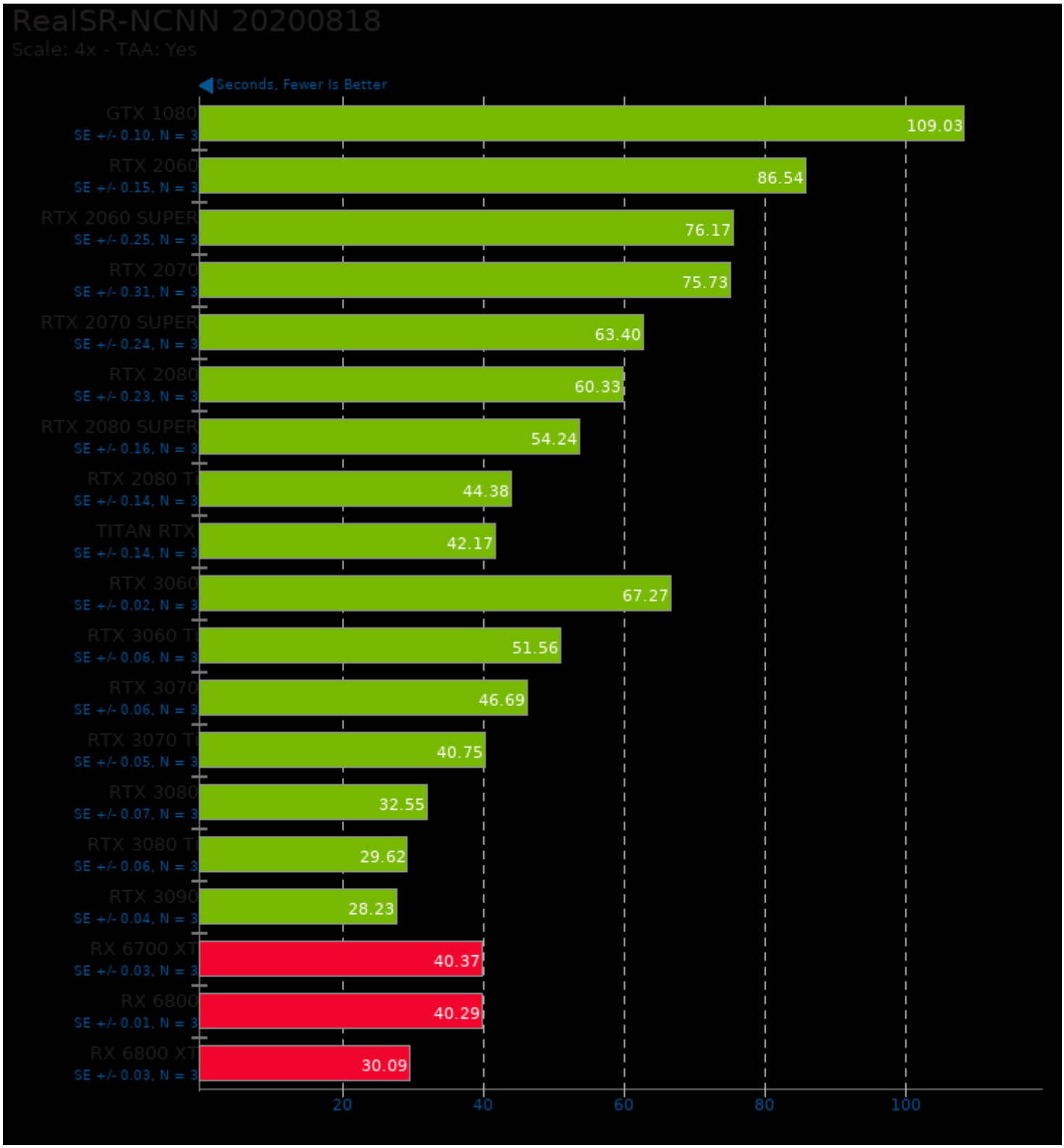
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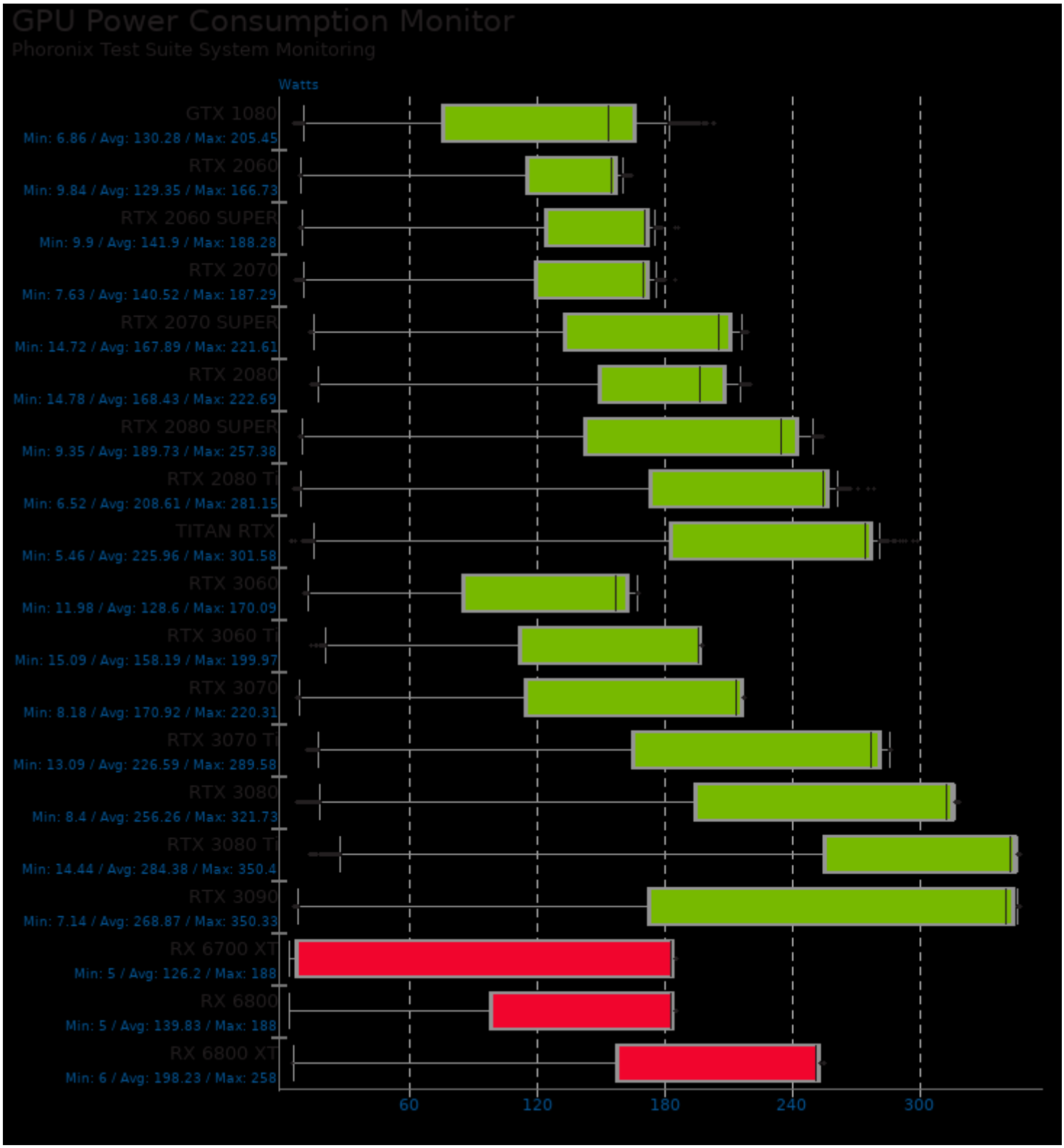
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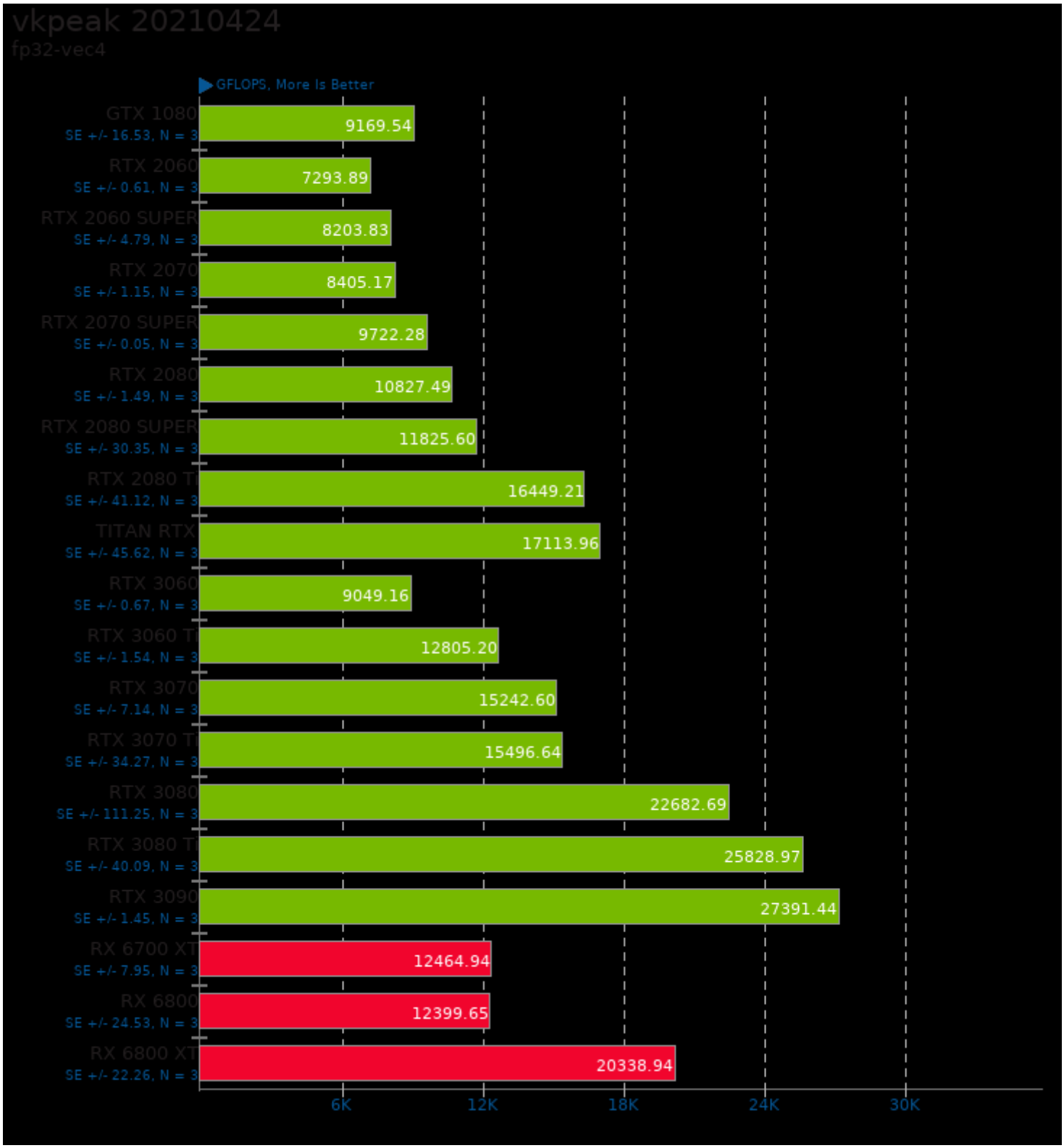
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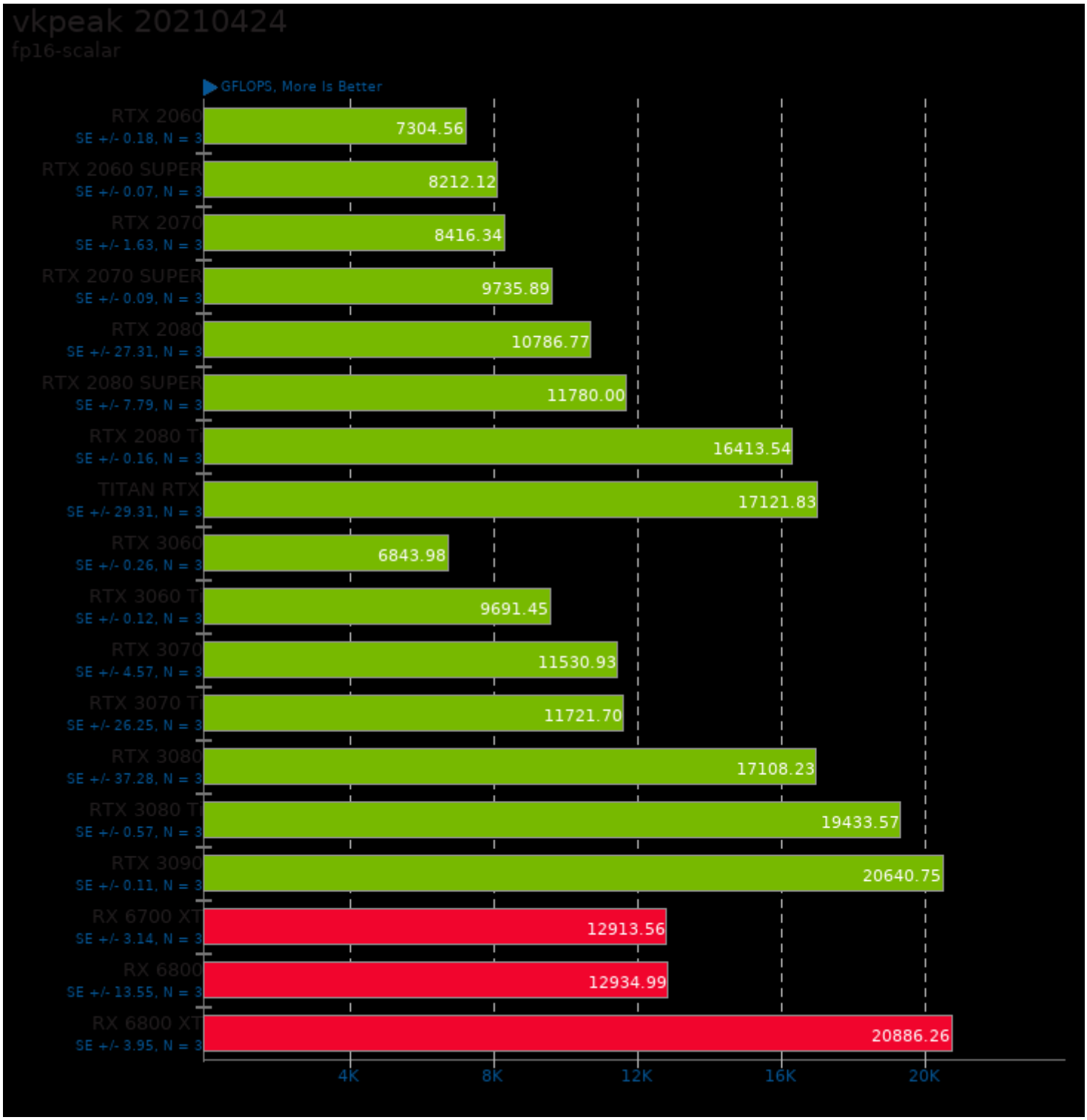
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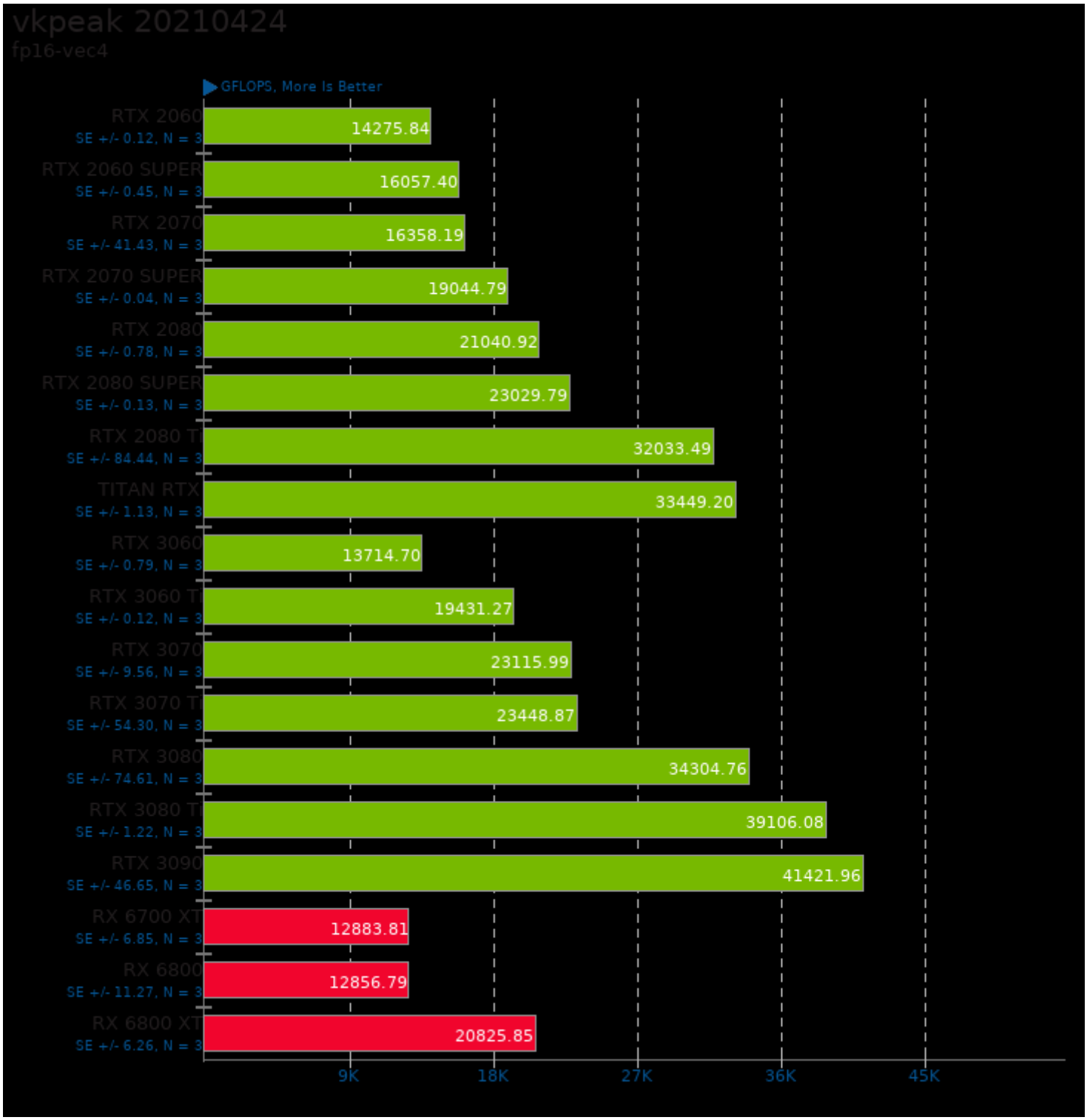
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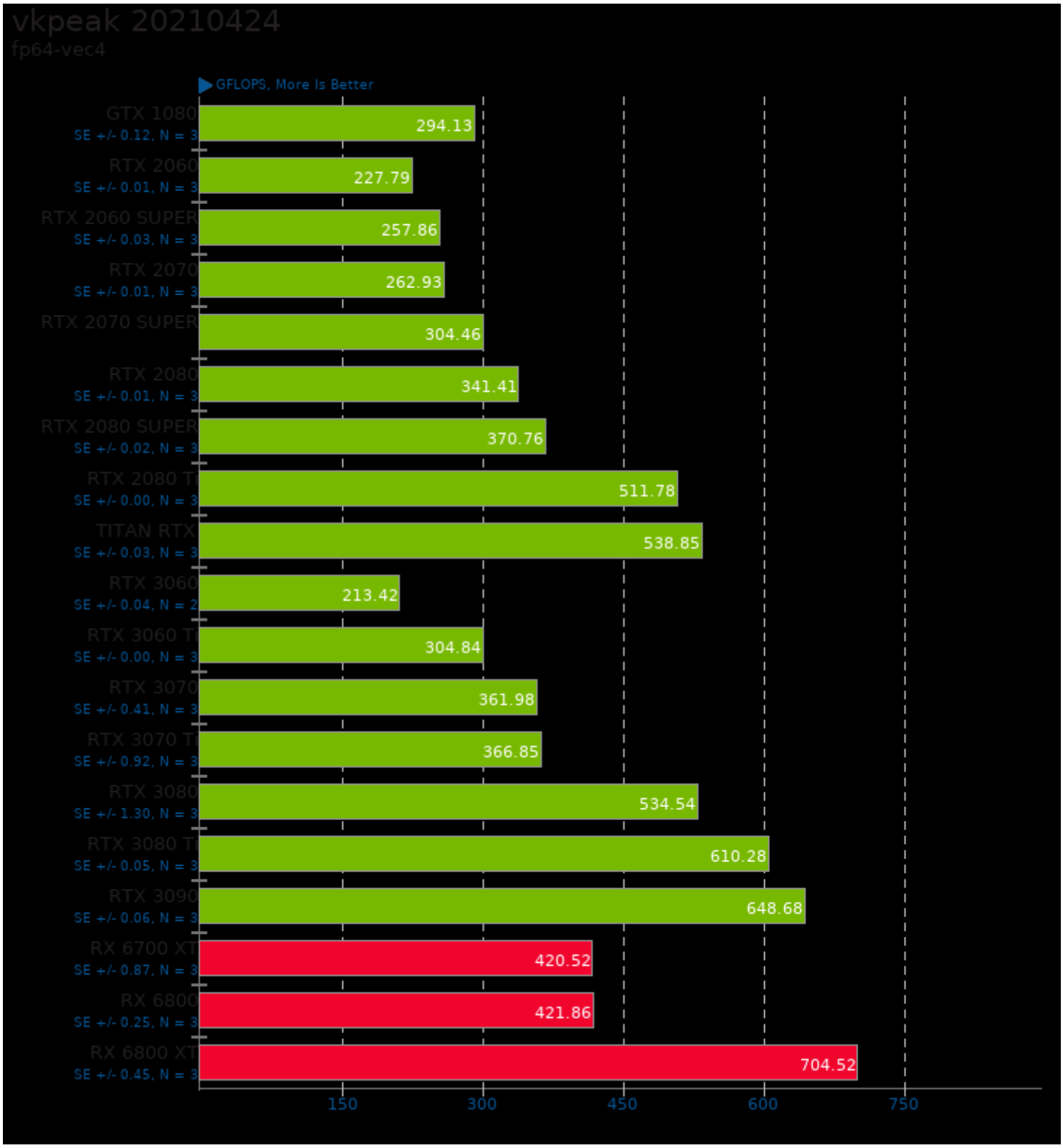
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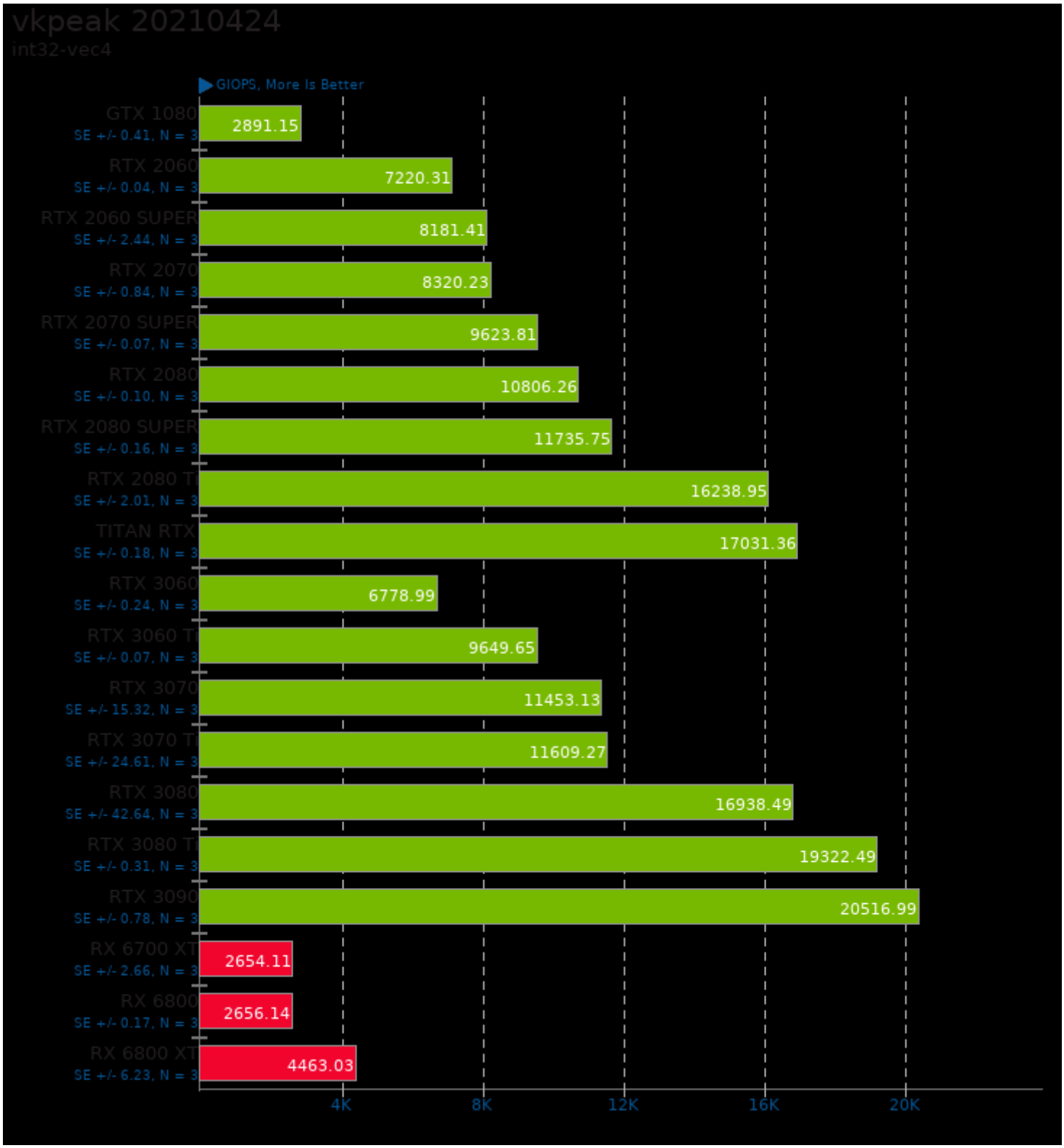
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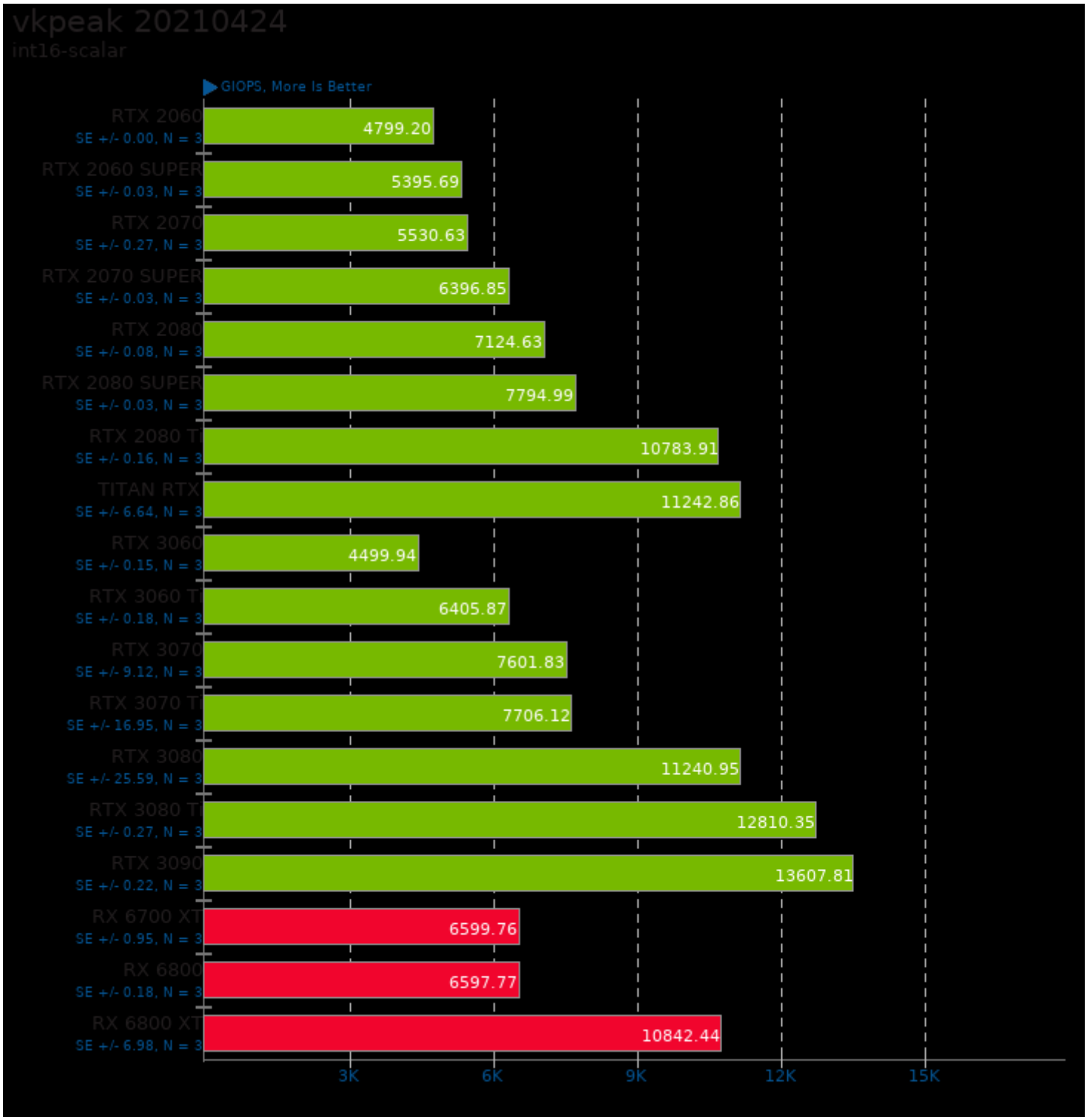
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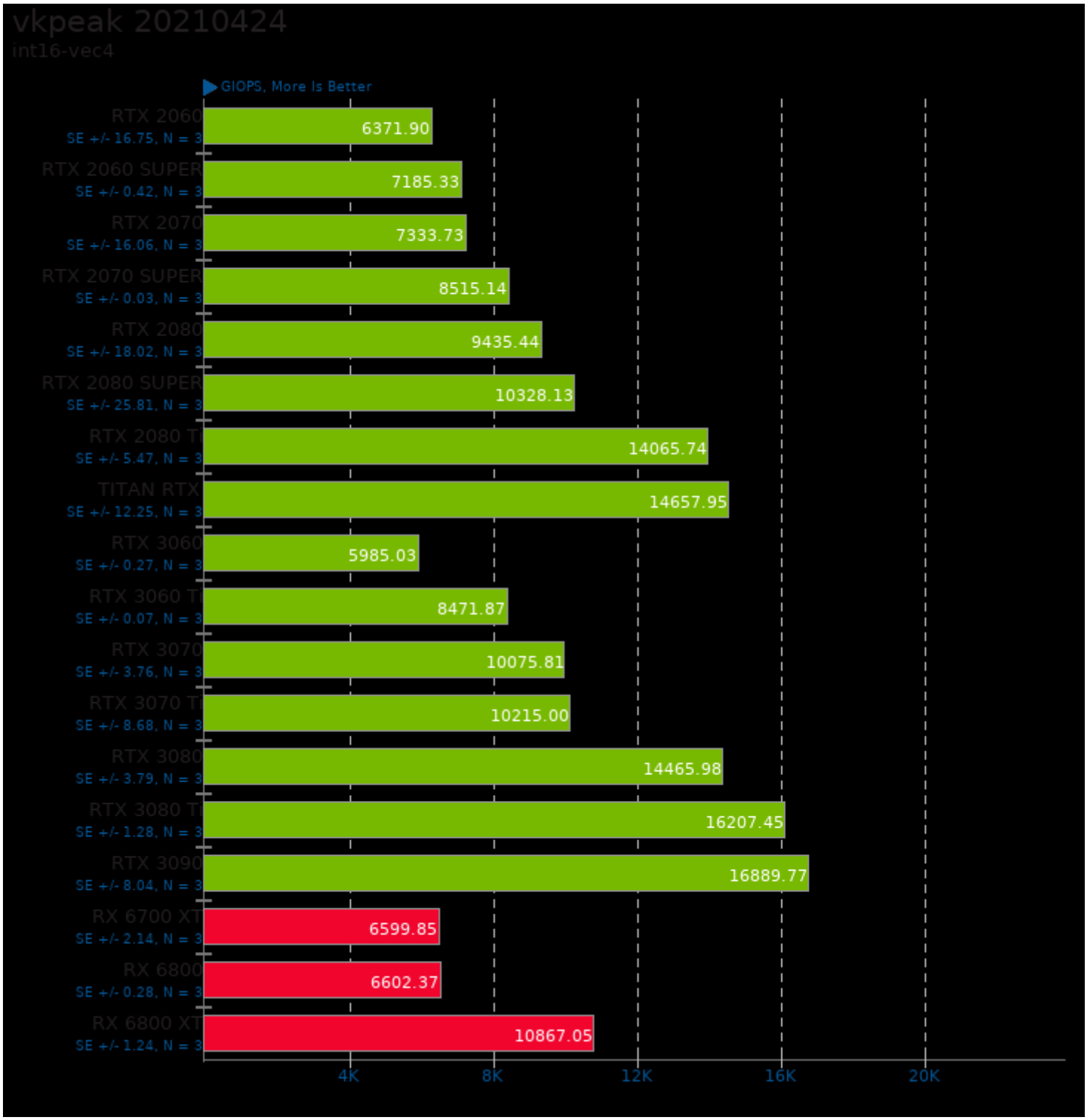
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



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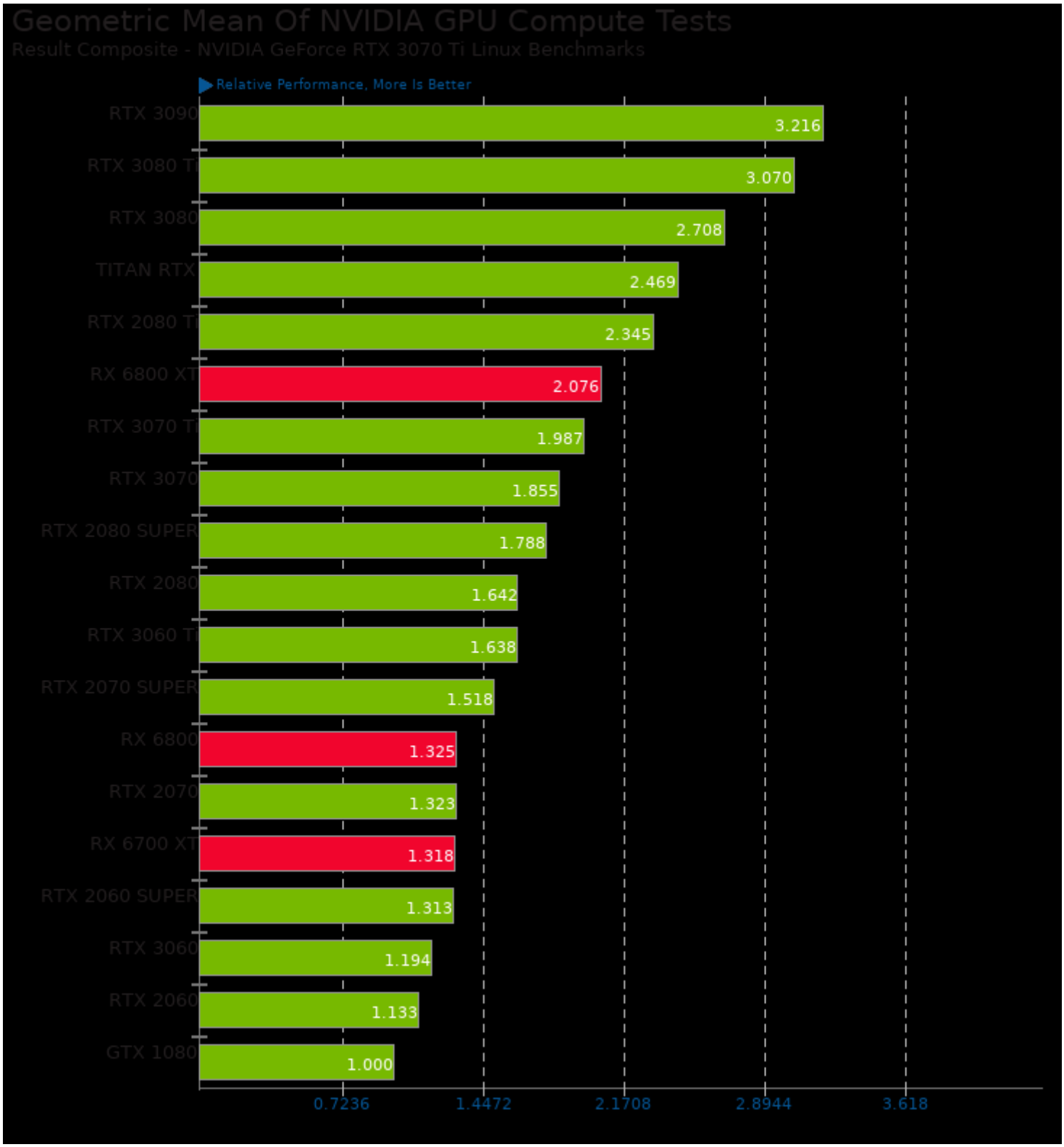


NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



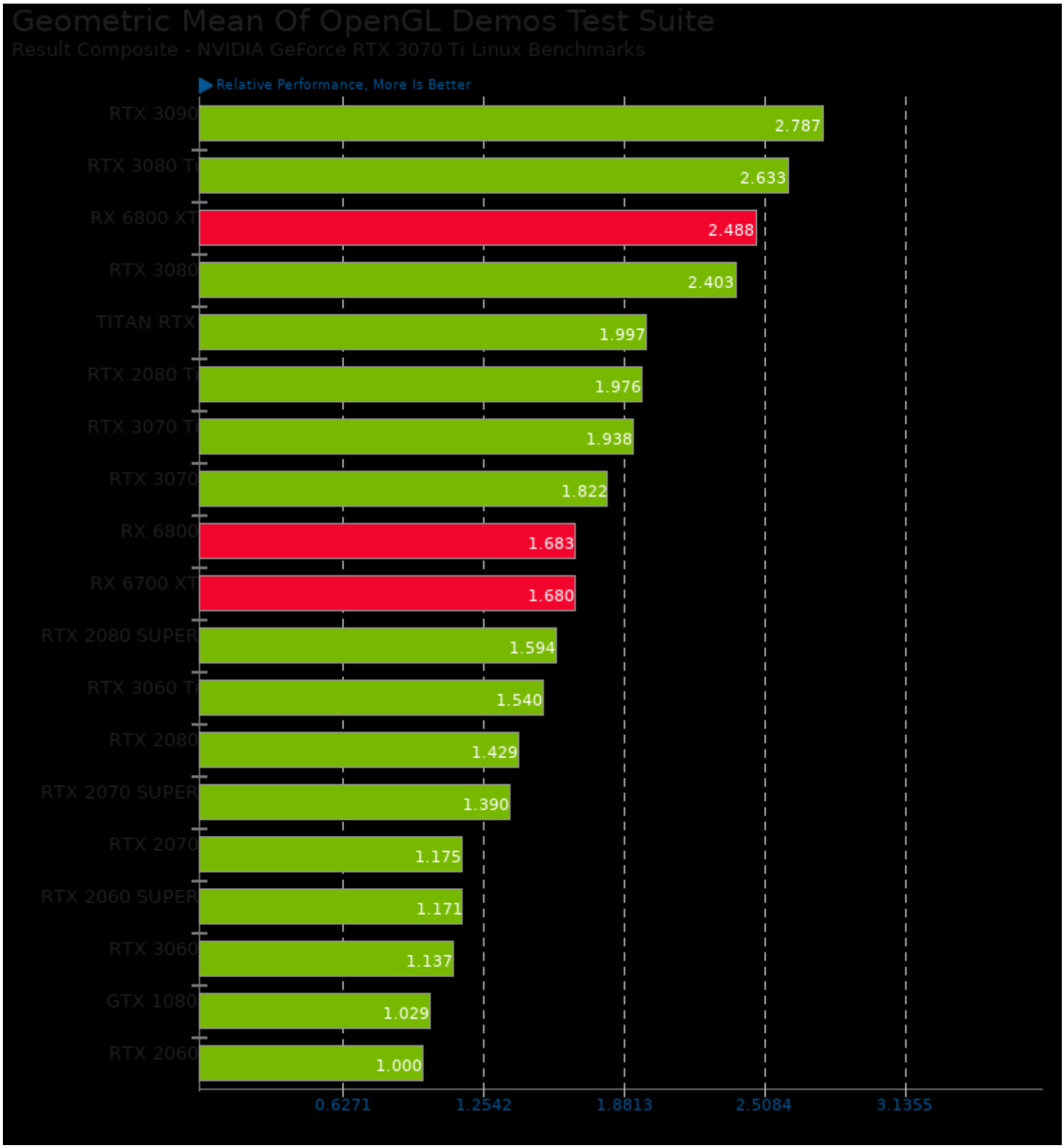
NVIDIA GeForce RTX 3070 Ti Linux Benchmarks

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

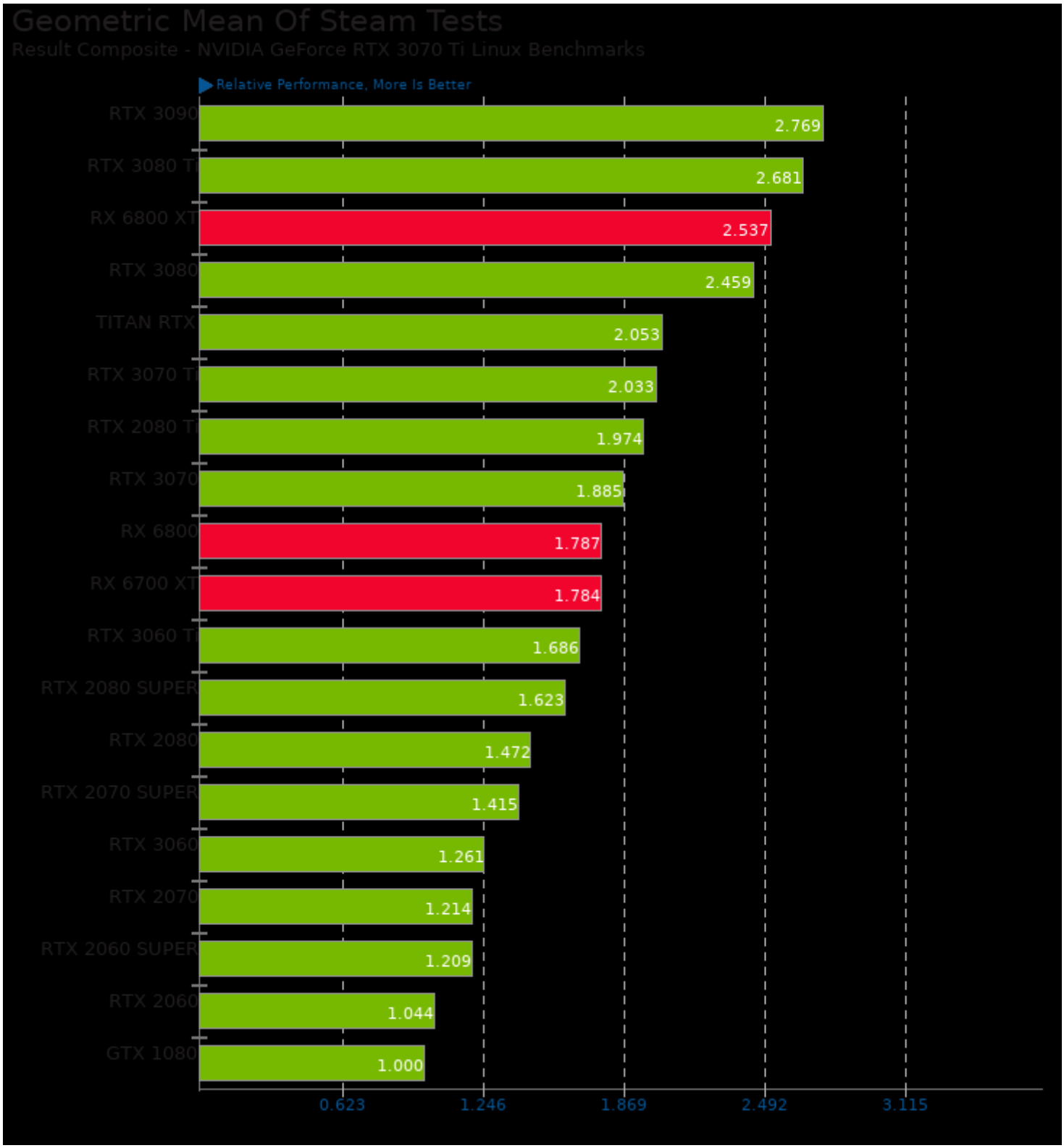


Geometric mean based upon tests: pts/vkfft, pts/vkresample, pts/vkpeak and pts/realsr-ncnn

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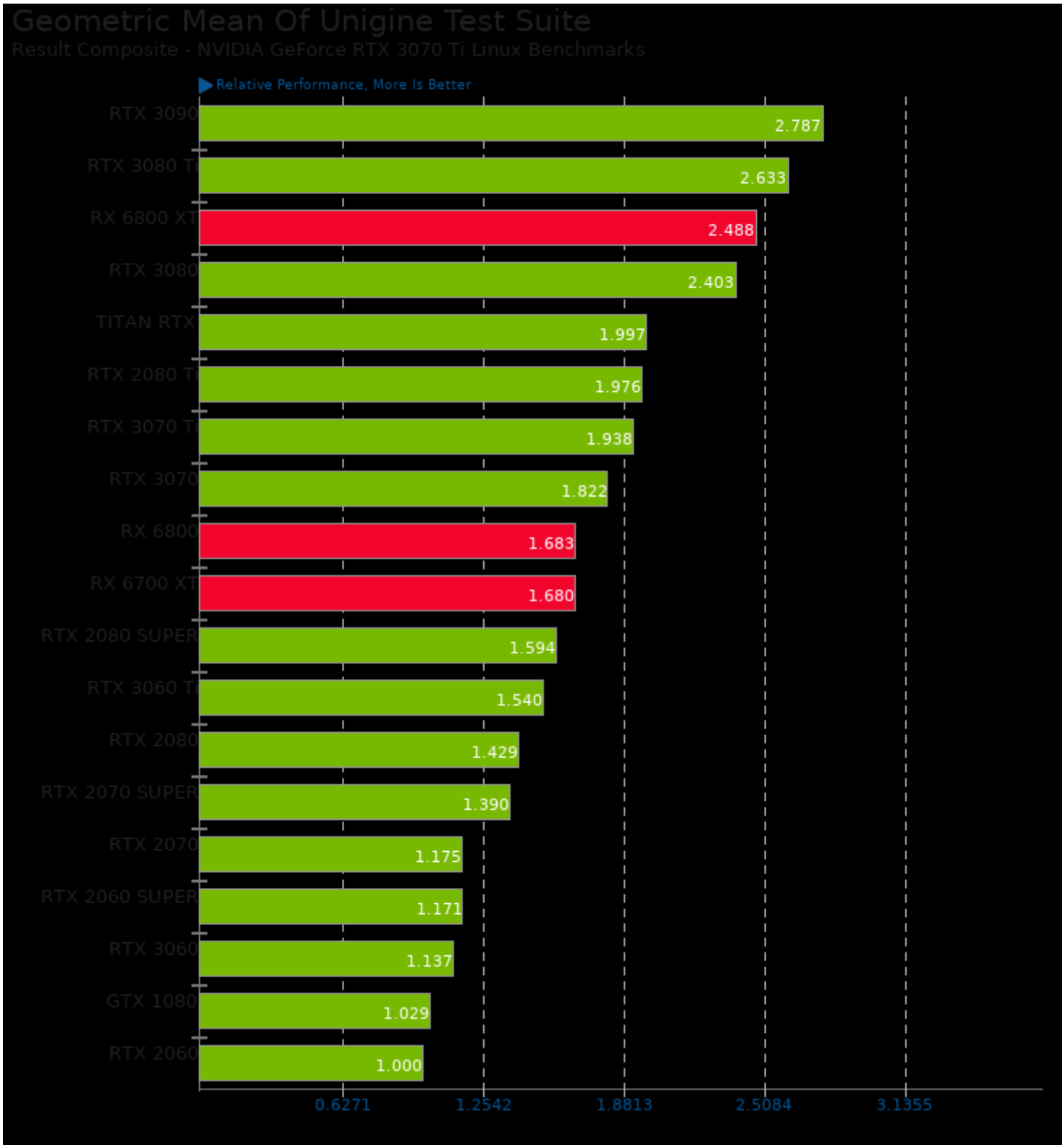


Geometric mean based upon tests: pts/unigine-heaven and pts/unigine-super

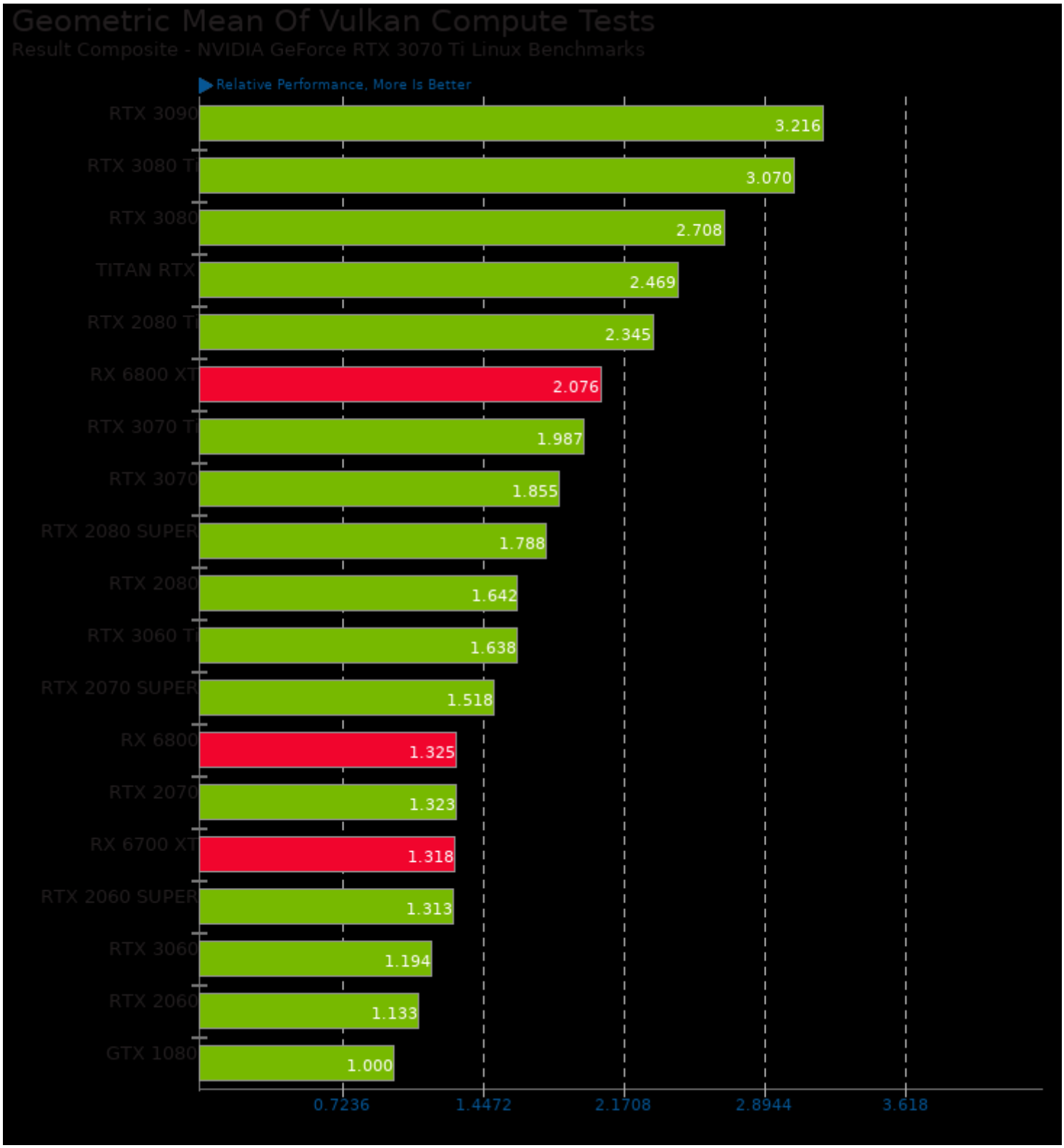


Geometric mean based upon tests: pts/batman-knight, pts/dirt-rally2, pts/f12020, pts/hitman2, pts/shadowofthetombraider and pts/strange-brigade

NVIDIA GeForce RTX 3070 Ti Linux Benchmarks



Geometric mean based upon tests: pts/unigine-heaven and pts/unigine-super



Geometric mean based upon tests: pts/vkfft, pts/vkresample, pts/vkpeak and pts/realsr-ncnn

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 19:28.