



Nouveau Linux 3.4 Mesa 8.1-devel

NVIDIA GeForce Linux graphics card benchmarking with the GeForce 8500GT, 8600GTS, 8800GT, 9500GT, 9600GSO, 9800GT, 9800GTX, GT 220, GT 240, GTX 460, and GTX 550 Ti graphics cards. Benchmarking under Ubuntu 12.04 LTS x86_64 with the proprietary NVIDIA 295.33 Linux driver and compared to the open-source Nouveau Gallium3D Linux graphics driver. Nouveau testing was with the latest Linux 3.4 kernel and Mesa 8.1-devel from Git as of early April 2012. This benchmarking is by Michael Larabel for a future article on Phoronix.com.

Automated Executive Summary

NVIDIA: GeForce GTX 460 had the most wins, coming in first place for 37% of the tests.

Based on the geometric mean of all complete results, the fastest (NVIDIA: GeForce GTX 460) was 4.907x the speed of the slowest (Nouveau: GeForce GTX 460).

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

VDrift (Resolution: 1920 x 1080) at 39.12x

Xonotic (Resolution: 1920 x 1080 - Effects Quality: High) at 31.79x

Lightsmark (Resolution: 1920 x 1080) at 25x

Reaction Quake 3 (Resolution: 1920 x 1080) at 18.836x

OpenArena (Resolution: 1920 x 1080) at 15.563x

World of Padman (Resolution: 1920 x 1080) at 11.547x

Xonotic (Resolution: 1920 x 1080 - Effects Quality: Low) at 8.69x

Cairo Performance Demos (Demo: Gears) at 7.497x

Xonotic (Resolution: 1280 x 1024 - Effects Quality: Low) at 6.13x

Urban Terror (Resolution: 1920 x 1080) at 6.102x.

Test Systems:

Nouveau: GeForce 8500GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8500 GT 256MB (499/399MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Nouveau: GeForce 8600GTS

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8600 GTS 256MB (675/1008MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Nouveau: GeForce 8800GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8800 GT 256MB (399/399MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v

Graphics Notes: EXA

System Notes: Compiz was running on this system.

Nouveau: GeForce 9500GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9500 GT 1024MB (550/399MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
Graphics Notes: EXA
System Notes: Compiz was running on this system.

Nouveau: GeForce 9600GSO

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9600 GSO 512MB (399/399MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
Graphics Notes: EXA
System Notes: Compiz was running on this system.

Nouveau: GeForce 9800GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9800 GT 512MB (399/399MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
Graphics Notes: EXA
System Notes: Compiz was running on this system.

Nouveau: GeForce 9800GTX

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9800 GTX 512MB (675/1101MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Nouveau: GeForce GT 220

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GT 220 1024MB (625/405MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 2.1 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
Graphics Notes: EXA
System Notes: Compiz was running on this system.

Nouveau: GeForce GTX 460

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 460 768MB (675/135MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 3.0 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Nouveau: GeForce GTX 550 Ti

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 550 Ti 1024MB (951/324MHz), Audio: Realtek ALC889, Monitor: DELL P2210H, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.4.0-999-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: nouveau 0.0.16, OpenGL: 3.0 Mesa 8.1-devel (git-c653287) Gallium 0.4, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
Graphics Notes: EXA
System Notes: Compiz was running on this system.

NVIDIA: GeForce 8500GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8500 GT 512MB (500/400MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v

System Notes: Compiz was running on this system.

NVIDIA: GeForce 8600GTS

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8600 GTS 256MB (675/1008MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce 8800GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 8800 GT 256MB (600/700MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce 9500GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9500 GT 1024MB (550/400MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce 9600GSO

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9600 GSO 1024MB (500/900MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution:

1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce 9800GT

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9800 GT 512MB (660/950MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce 9800GTX

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce 9800 GTX/9800 GTX+ 512MB (675/1100MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce GT 220

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GT 220 1024MB (625/400MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 3.3.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce GTX 460

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 460 768MB (675/1800MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 4.2.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

NVIDIA: GeForce GTX 550 Ti

Processor: AMD FX-8150 Eight-Core @ 3.60GHz (8 Cores), Motherboard: ASUS Crosshair V Formula, Chipset: AMD ATI RD890, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 550 Ti 1024MB (951/2178MHz), Audio: Realtek ALC889, Network: Intel 82583V Gigabit Connection

OS: Ubuntu 12.04, Kernel: 3.2.0-22-generic (x86_64), Desktop: Unity 5.8.0, Display Server: X Server 1.11.3, Display Driver: NVIDIA 295.33, OpenGL: 4.2.0 NVIDIA 295.33, Compiler: GCC 4.6, File-System: ext4, Screen Resolution: 1920x1080

Compiler Notes: --build=x86_64-linux-gnu --disable-werror --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i686 --with-tune=generic -v
System Notes: Compiz was running on this system.

	Nou vea u: GeF orce 850 0GT S	Nou vea u: GeF orce 860 0GT O	Nou vea u: GeF orce 880 0GT O	Nou vea u: GeF orce 950 0GT O	Nou vea u: GeF orce 960 0GS	Nou vea u: GeF orce 980 0GT X	Nou vea u: GeF orce 980 0GT X	Nou vea u: GeF orce GT 220 460 550 Ti	Nou vea u: GeF orce GT 220 460 550 Ti	NVI DIA: GeF orce 850 0GT S	NVI DIA: GeF orce 860 0GT S	NVI DIA: GeF orce 880 0GT S	NVI DIA: GeF orce 950 0GT O	NVI DIA: GeF orce 960 0GS O	NVI DIA: GeF orce 980 0GT X	NVI DIA: GeF orce 980 0GT X	NVI DIA: GeF orce GT 220 460 550 Ti	NVI DIA: GeF orce GT 220 460 550 Ti	NVI DIA: GeF orce GT 220 460 550 Ti
Xonotic - 1920 x 1080 - Low (FPS)	120. 36	104. 62	98.8 9	76.9 8	117. 92	126. 31	104. 93	32.7 6	88.7 9	67.2 6	117. 21	267. 36	95.1 3	123. 36	280. 05	283. 17	104. 89	284. 68	284. 13
Normalized	42.28	36.75	34.74	27.04	41.42	44.37	36.86	11.51	31.19	23.63	41.17	93.92	33.42	43.33	98.37	99.47	36.84	100%	99.81
Standard Deviation	0.8%	0.3%	0.1%	0.1%	0.2%	0.4%	0.3%	0%	0.1%	0.1%	0.3%	0.4%	0.2%	0.1%	0.1%	0.3%	0.2%	0.3%	0.3%
Xonotic - 1920 x 1080 - High	6.20	35.8 3	29.9 4	54.1 6	91.1 9	41.8 5	14.6 4	38.4 9	24.1 7	44.2 2	100. 70	38.7 8	49.7 1	147. 88	165. 55	43.3 3	197. 10	188. 48	
Normalized	3.15	18.18	15.19	27.48	46.27	21.23	7.43	19.53	12.26	22.44	51.09	19.68	25.22	75.03	83.99	21.98	100%	95.63	
Standard Deviation	0.1%	0.1%	0.1%	0.1%	0.9%	0.2%	0.1%	0.3%	0.2%	18.1	1.1%	0.1%	0%	0.4%	0.3%	0.2%	0.6%	0.4%	

Nouveau Linux 3.4 Mesa 8.1-devel

Xonotic - 1280 x 1024 - Low (FPS)	129.	133.	130.	105.	132.	134.	132.	47.9	123.	107.	250.	288.	154.	186.	293.	293.	150.	292.	293.
	21	55	26	71	18	60	73	1	90	00	91	90	43	79	70	58	22	30	63
Normalized	43.99	45.47	44.35	35.99	45.01	45.83	45.19	16.31	42.19	36.43	85.43	98.37	52.58	63.6	100%	99.96	51.15	99.52	99.98
Standard	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Deviation	0.6%	1.1%	0.6%	0%	1.7%	2.7%	0.8%	0.1%	0.4%	0.1%	0.2%	0.3%	0.2%	0.3%	0.2%	0.6%	0.1%	0.3%	0.6%
Xonotic - 1024 x 768 - Low (FPS)	123.	134.	132.	133.	130.	132.	134.	72.9	132.	152.	284.	292.	218.	252.	293.	295.	217.	291.	292.
	91	68	59	41	53	13	23	3	85	56	19	35	31	24	65	05	50	25	51
Normalized	42%	45.65	44.94	45.22	44.24	44.78	45.49	24.72	45.03	51.71	96.32	99.08	73.99	85.49	99.53	100%	73.72	98.71	99.14
Standard	0.9%	2.5%	2%	1%	1.7%	1%	0.7%	0.2%	0.8%	0.2%	0.7%	0.9%	0.1%	0.2%	0.3%	0.1%	0.1%	0.9%	0.4%
Deviation	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
VDrift - 1920 x 1080 (FPS)	98.1	89.1	55.7	43.5	82.0	133.	56.4	17.3	46.2	3.41	6.22	10.7	8.83	11.1	33.9	38.1	10.6	53.2	44.5
	5	3	9	4	8	40	1	5	7			4		5	9	9	3	7	1
Normalized	73.58	66.81	41.82	32.64	61.53	100%	42.29	13.01	34.69	2.56	4.66	8.05	6.62	8.36	25.48	28.63	7.97	39.93	33.37
Standard	0.1%	48.9	0.1%	0.1%	0.1%	1%	0.1%	0.1%	0.1%	1.7%	5.5%	0.5%	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	0.2%
Deviation	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Urban Terror - 1920 x 1080 (FPS)	74.6	75.0	72.6	69.1	76.6	78.9	74.5	30.6	69.1	52.1	117.	144.	103.	129.	186.	185.	104.	184.	186.
	7	7	0	7	3	0	7	0	0	3	47	93	40	07	73	60	93	87	33
Normalized	39.99	40.2	38.88	37.04	41.04	42.25	39.93	16.39	37.01	27.92	62.91	77.61	55.37	69.12	100%	99.39	56.19	99%	99.79
Standard	0.7%	0.8%	0.6%	0.2%	0.9%	0.5%	0.4%	0%	0.1%	0.4%	2.7%	1.4%	0.3%	0.3%	0.3%	0.5%	0.1%	1%	0.3%
Deviation	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Smokin Guns - 1920 x 1080 (FPS)	84.5	85.7	82.4	77.9	88.7	89.6	84.2	32.2	76.9										
	0	3	7	7	7	0	0	7	7										
Normalized	94.31	95.68	92.04	87.02	99.07	100%	93.97	36.02	85.9										
Standard	0.8%	0.8%	0.3%	0.1%	1.1%	1.9%	0.2%	0.2%	0.2%										
Deviation	%	%	%	%	%	%	%	%	%										
Reaction	58.3	13.1	35.5	30.2	50.2	90.6	36.8	13.6	35.0	18.7	20.6	33.9	48.9	55.1	147.	166.	47.0	248.	220.
Quake 3 - 1920 x 1080 (FPS)	7	7	3	3	7	3	0	0	7	3	3	7	0	7	77	90	3	07	30
Normalized	23.53	5.31	14.32	12.19	20.26	36.53	14.83	5.48	14.14	7.55	8.32	13.69	19.71	22.24	59.57	67.28	18.96	100%	88.81
Standard	0.7%	0.4%	0.2%	0.2%	0.1%	0.3%	0.3%	0%	0.2%	0.3%	0.3%	0.3%	0.2%	0.6%	2.5%	1.9%	0.1%	6.9%	1.6%
Deviation	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

Nouveau Linux 3.4 Mesa 8.1-devel

World of Padman - 1920 x 1080 (FPS)	112.	99.3	100.	79.1	112.	120.	102.	35.8	86.7	52.9	113.	148.	102.	129.	359.	375.	101.	413.	410.		
	43	3	73	0	53	00	20	0	0	0	30	47	13	07	67	77	77	37	97		
	Normalized	27.2	24.03	24.37	19.14	27.22	29.03	24.72	8.66	20.97	12.8	27.41	35.92	24.71	31.22	87.01	90.9	24.62	100%	99.42	
Standard	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%		
Deviation	0.3%	0.6%	0.2%	0.1%	0.1%	0.8%	0.7%	0%	0%	2%	3.4%	1.8%	0.1%	0.2%	1.3%	0.6%	0.2%	0.8%	0.4%		
OpenArena - 1920 x 1080 (FPS)	69.3	131.	108.	101.	75.0	119.	142.	104.	29.9	80.7	48.0	176.	305.	95.5	119.	363.	402.	99.2	465.	432.	
	3	73	13	20	7	47	87	20	3	0	7	93	37	0	17	07	03	7	80	17	
	Normalized	14.88	28.28	23.21	21.73	16.12	25.65	30.67	22.37	6.43	17.33	10.32	37.98	65.56	20.5	25.58	77.95	86.31	21.31	100%	92.78
Standard	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%		
Deviation	0.1%	1%	0.2%	1.6%	0.1%	0.5%	2.7%	0.5%	3.2%	0%	0.1%	1.5%	0.2%	0.8%	0.8%	0.1%	2.3%	0.3%	1%	2.6%	
Lightsmark - 1920 x 1080 (FPS)	15.9	41.5	32.2	27.9	24.0	43.7	80.1	37.3	20.0	45.6	28.7	84.4	166.	60.1	78.8	223.	257.	62.0	397.	333.	
	1	8	9	5	6	5	0	6	3	1	4	7	85	6	4	15	02	6	75	84	
	Normalized	4%	10.45	8.12	7.03	6.05	11%	20.14	9.39	5.04	11.47	7.23	21.24	41.95	15.13	19.82	56.1	64.62	15.6	100%	83.93
Standard	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.3%	0.4%	0.2%	3.3%	2.3%	4.9%	1.6%	0.4%	1.3%	0.9%	0.7%	0.4%	0.8%	
Deviation	0.80	0.83	0.51	0.82	0.51	0.81	0.84	0.82	0.76	0.82	0.71	0.94	0.96	0.95	0.69	0.97	0.97	0.90	0.90	0.90	
Performance Demos - Fish (FPS)	82.47	85.57	52.58	84.54	52.58	83.51	86.6	84.54	78.35	84.54	73.2	96.91	98.97	97.94	71.13	100%	100%	92.78	92.78	92.78	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
	Standard	0.7%	0.7%	0%	0.7%	1.1%	0%	1.2%	0.7%	0.8%	0%	13.8	0.6%	0%	0%	0%	0.6%	1%	8%	2.6%	0.6%
	Deviation	35.9	41.3	28.6	38.4	28.1	38.3	41.6	38.5	30.5	39.1	40.8	66.0	65.5	49.5	34.7	71.1	73.6	115.	209.	211.
Performance Demos - Gears (FPS)	3	5	6	8	7	8	5	5	0	6	9	2	0	8	7	9	5	01	84	19	
	Normalized	17.01	19.58	13.57	18.22	13.34	18.17	19.72	18.25	14.44	18.54	19.36	31.26	31.01	23.48	16.46	33.71	34.87	54.46	99.36	100%
	Standard	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Deviation	0.8%	0.4%	0.2%	0.9%	0.6%	0.4%	0.3%	1.5%	0.3%	0.7%	0.2%	0.1%	0.4%	0.1%	0.2%	0.3%	0.3%	0.6%	1.2%	0.8%	
Performance Demos - Charts (FPS)	7.75	7.83	7.37	7.92	7.30	7.85	7.80	7.85	7.62	7.93	9.00	9.52	9.54	9.28	8.74	9.68	9.64	10.4	8.61	10.6	
																		5		9	
	Normalized	72.5	73.25	68.94	74.09	68.29	73.43	72.97	73.43	71.28	74.18	84.19	89.06	89.24	86.81	81.76	90.55	90.18	97.75	80.54	100%
	Standard	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Deviation	0.8%	0.2%	0.5%	1.8%	1%	0.3%	1%	0.5%	1.1%	0.4%	0.1%	0.8%	1.3%	0.2%	0.6%	0.7%	1.2%	1.7%	0.1%	0.4%	

Doom 3 - 30.9 54.6 37.4 43.9 29.5 51.1 55.9 45.7 28.4 49.6
1024 x 768 0 3 7 0 3 7 3 3 3 7

- Low

(FPS)

Normalized 55.25 97.68 66.99 78.49 52.8 91.49 100% 81.76 50.83 88.81

%

Standard 0% 0.2% 0.2% 0.4% 0.2% 0.5% 1.2% 0.3% 0.2% 0.4%

Deviation

Doom 3 - 21.9 47.8 30.7 31.7 22.7 44.0 55.3 35.5 17.8 36.5

1280 x 0 0 0 7 0 7 7 0 0 3

1024 -

Low (FPS)

Normalized 39.55 86.33 55.45 57.38 41% 79.59 100% 64.11 32.15 65.97

%

Standard 0% 0.6% 0% 0.2% 0% 0.1% 0.9% 0% 0% 0.2%

Deviation

Doom 3 - 14.8 36.5 23.4 23.1 16.6 33.7 54.0 26.5 10.9 24.2

1920 x 0 0 0 0 0 3 0 3 0 7

1080 -

Low (FPS)

Normalized 27.41 67.59 43.33 42.78 30.74 62.46 100% 49.13 20.19 44.94

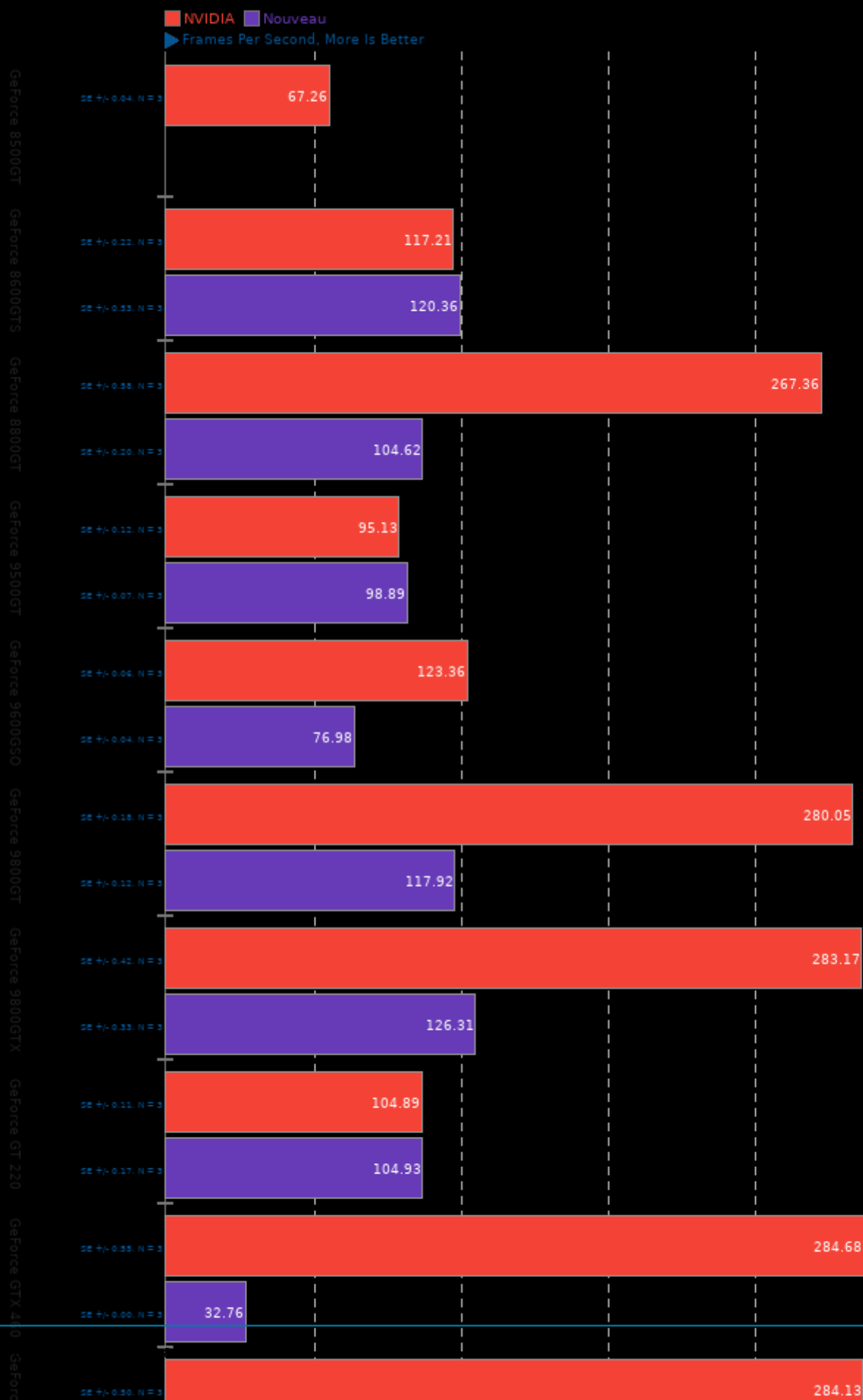
%

Standard 6.6% 0.3% 0% 0% 0% 0.2% 1.1% 3.2% 0% 0.2%

Deviation

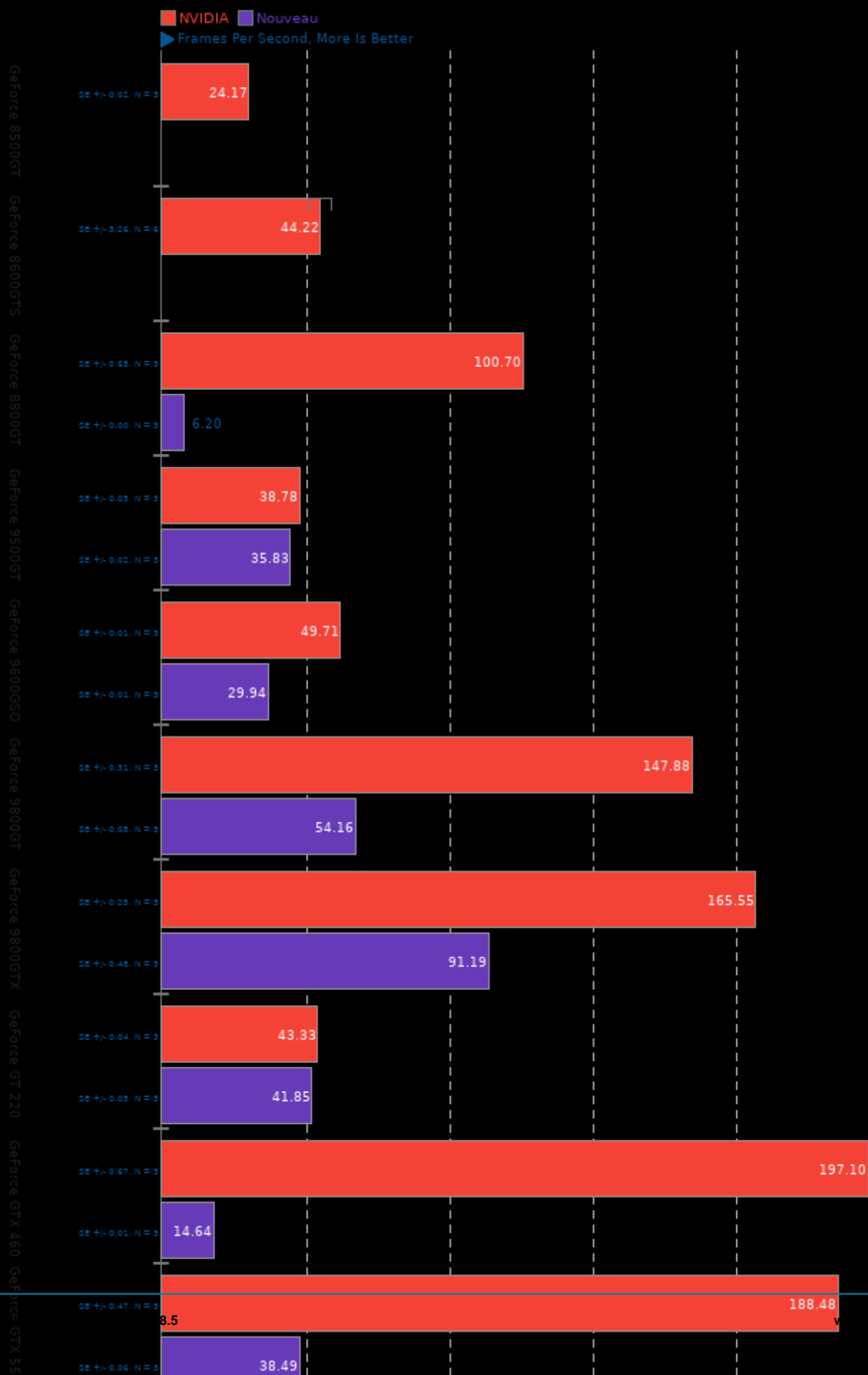
Xonotic 0.6

Resolution: 1920 x 1080 - Effects Quality: Low



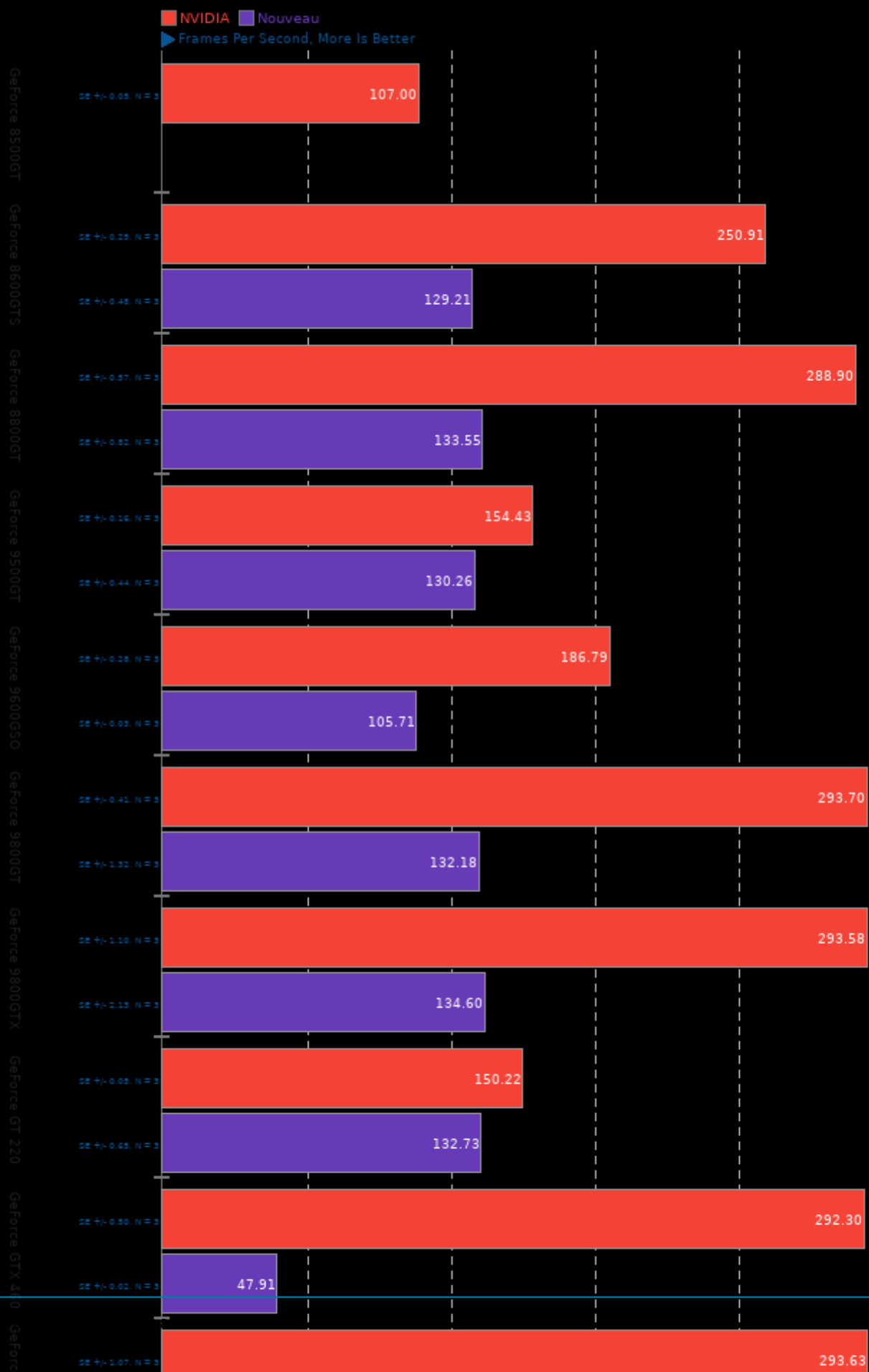
Xonotic 0.6

Resolution: 1920 x 1080 - Effects Quality: High



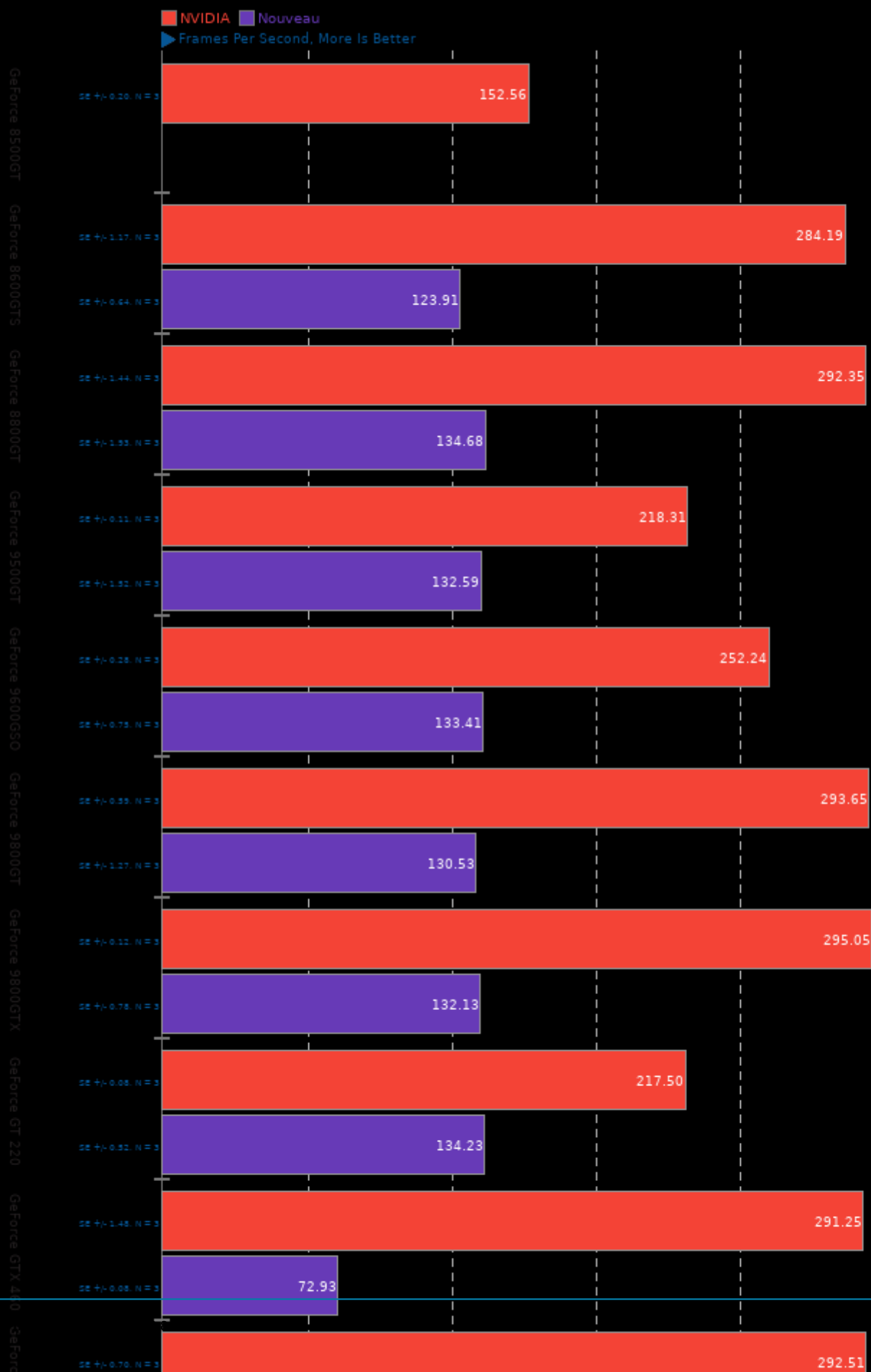
Xonotic 0.6

Resolution: 1280 x 1024 - Effects Quality: Low



Xonotic 0.6

Resolution: 1024 x 768 - Effects Quality: Low



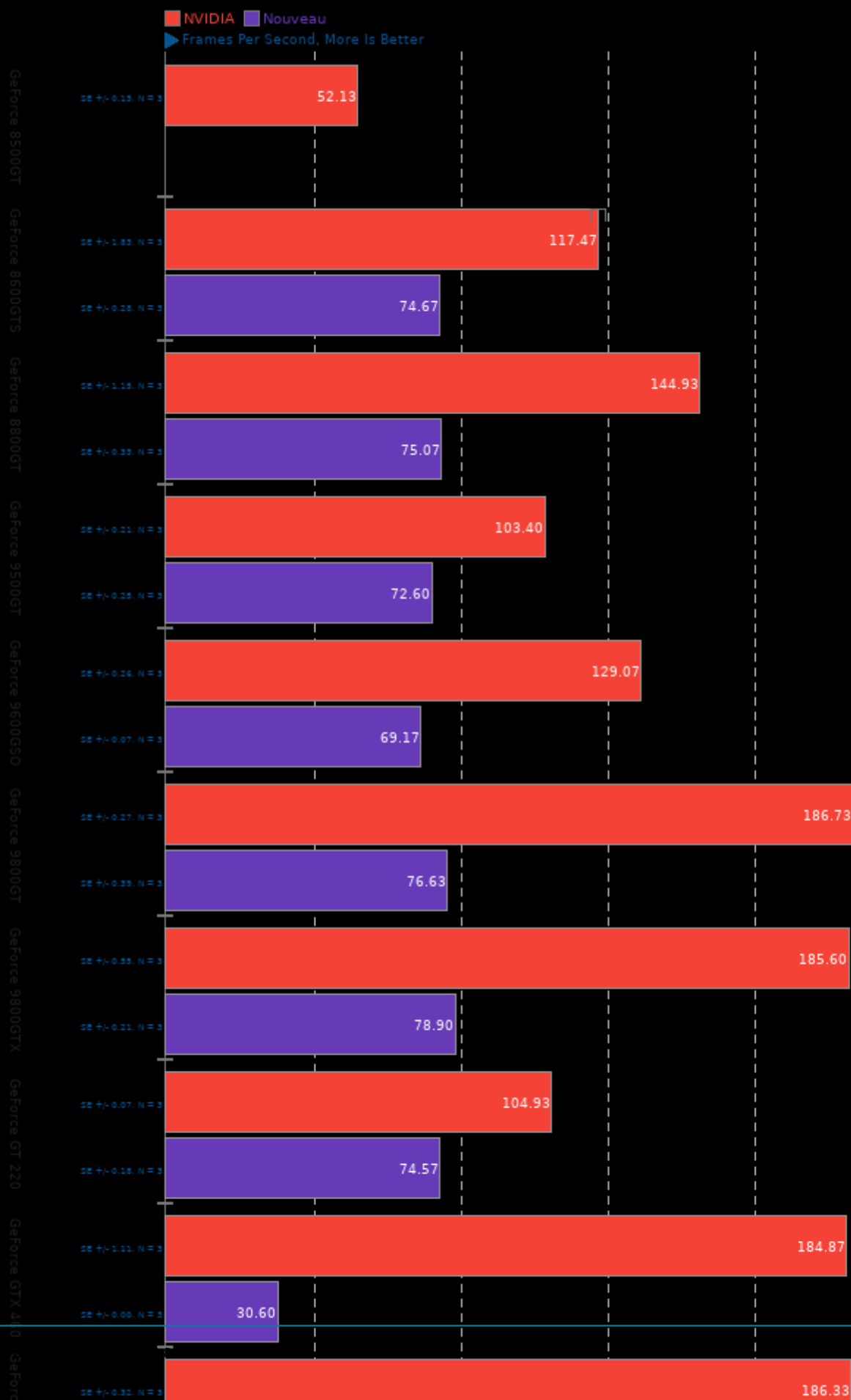
VDrift 2010-06-30

Resolution: 1920 x 1080



Urban Terror 4.1

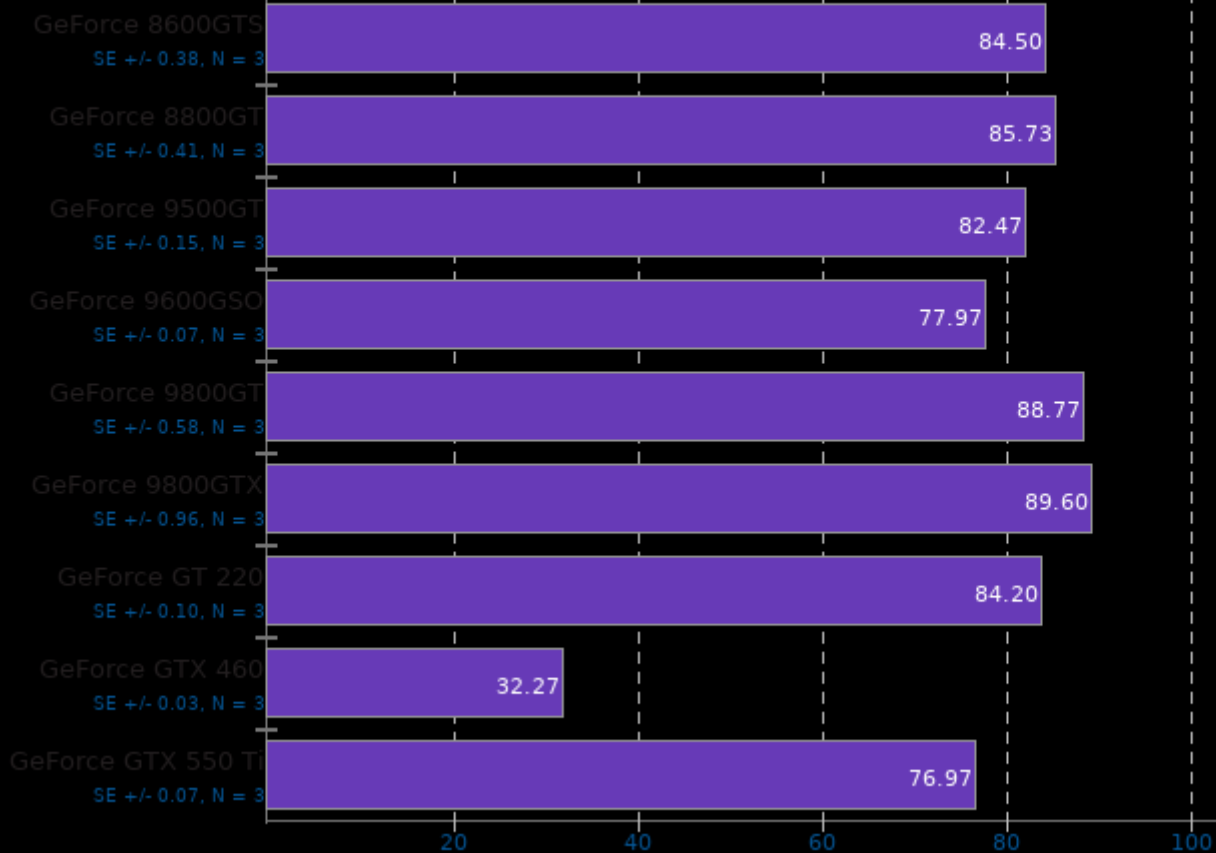
Resolution: 1920 x 1080



Smokin Guns 1.1b4

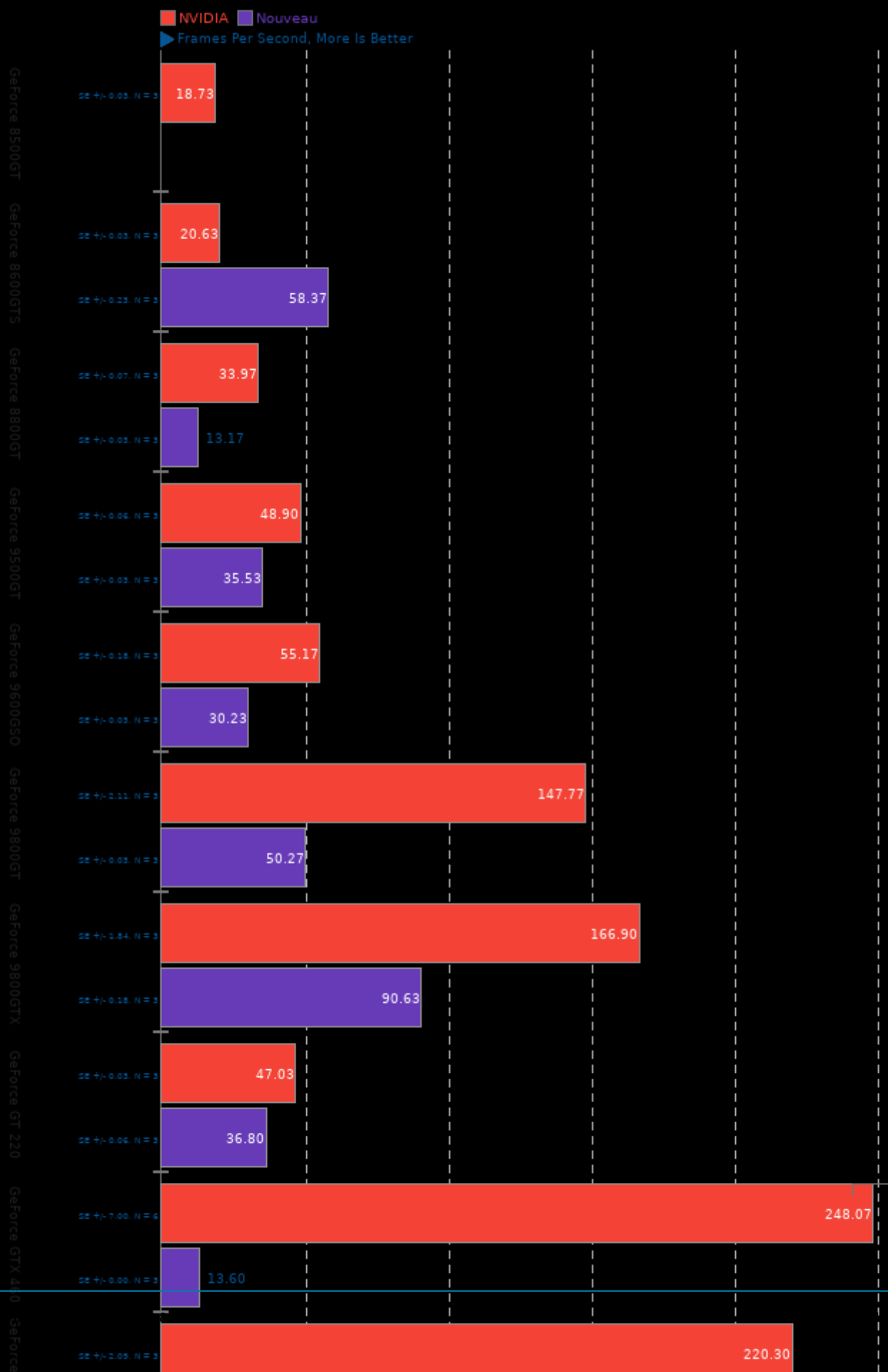
Resolution: 1920 x 1080

► Frames Per Second, More Is Better



Reaction Quake 3 1.0 Beta

Resolution: 1920 x 1080



World of Padman 1.2

Resolution: 1920 x 1080



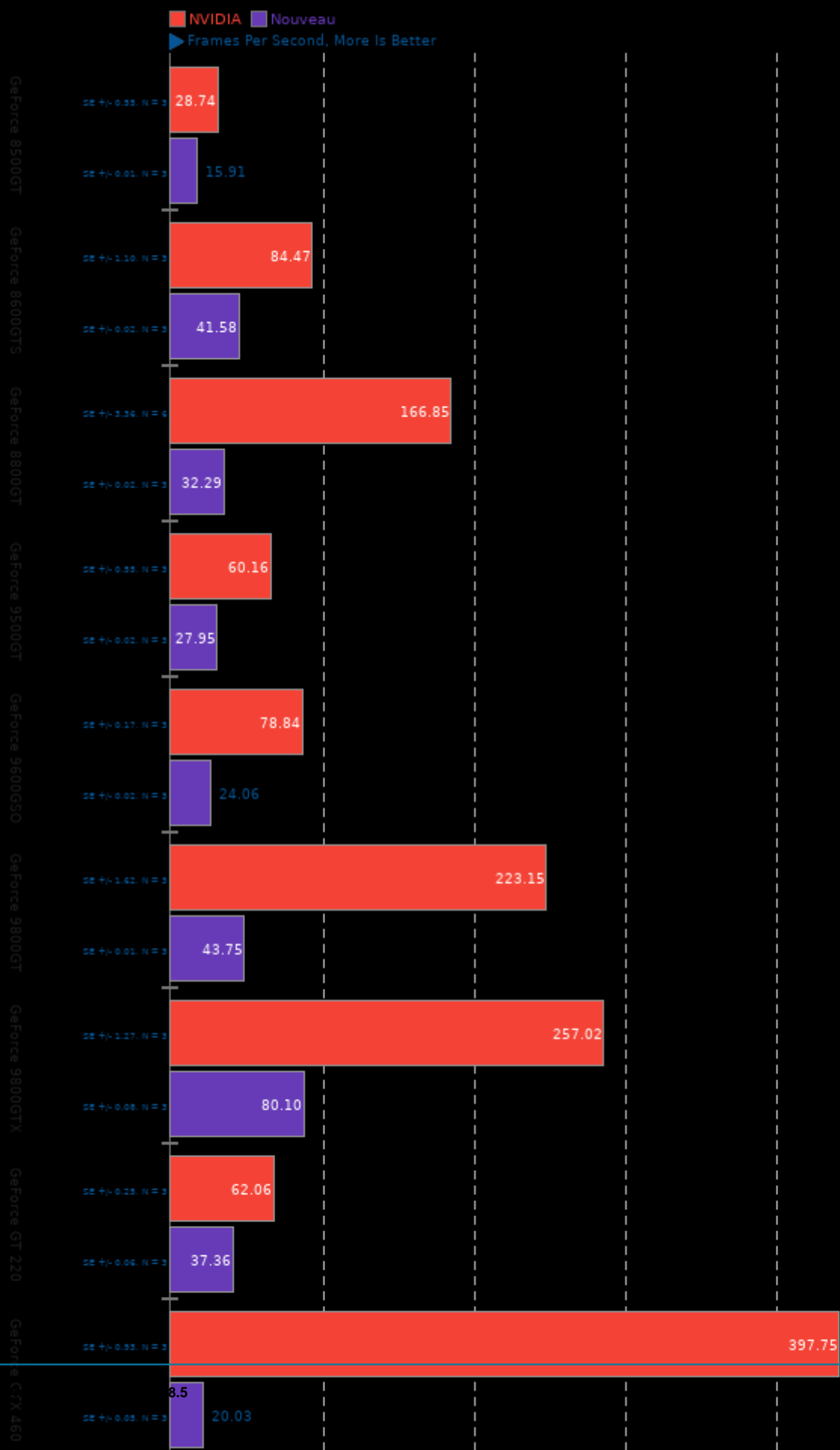
OpenArena 0.8.5

Resolution: 1920 x 1080



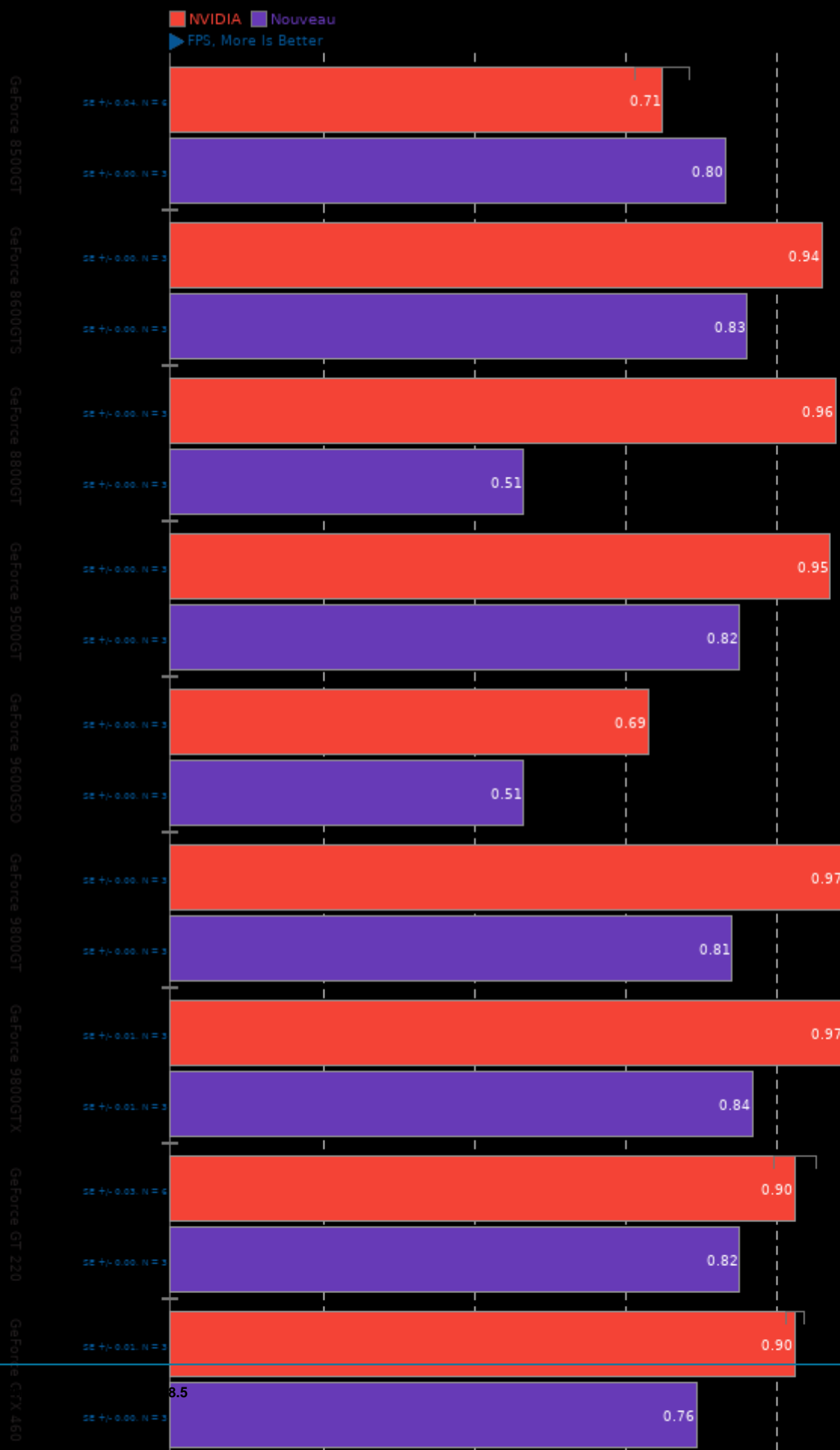
Lightmark 2008

Resolution: 1920 x 1080



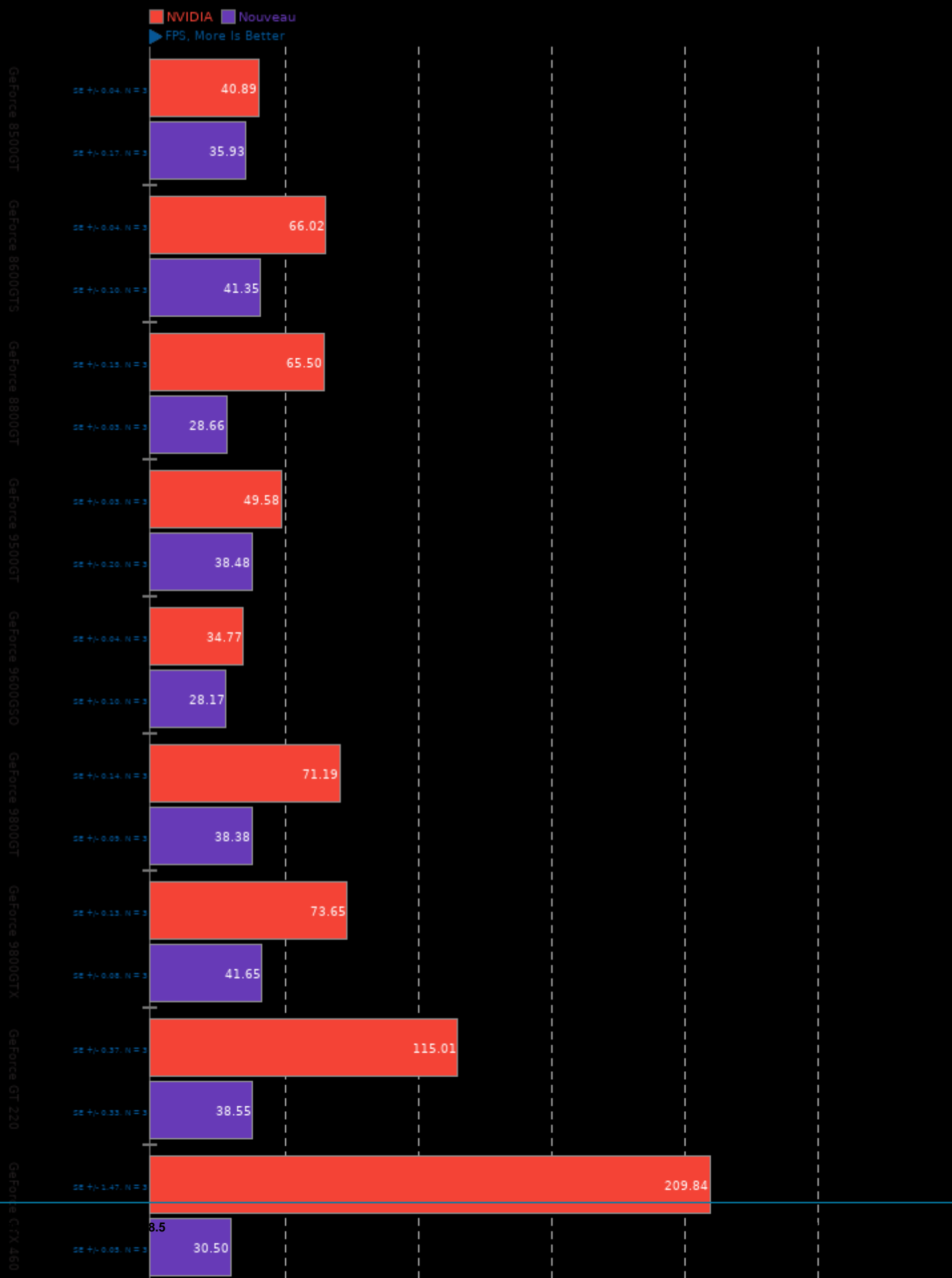
Cairo Performance Demos 2012-01-30

Demo: Fish



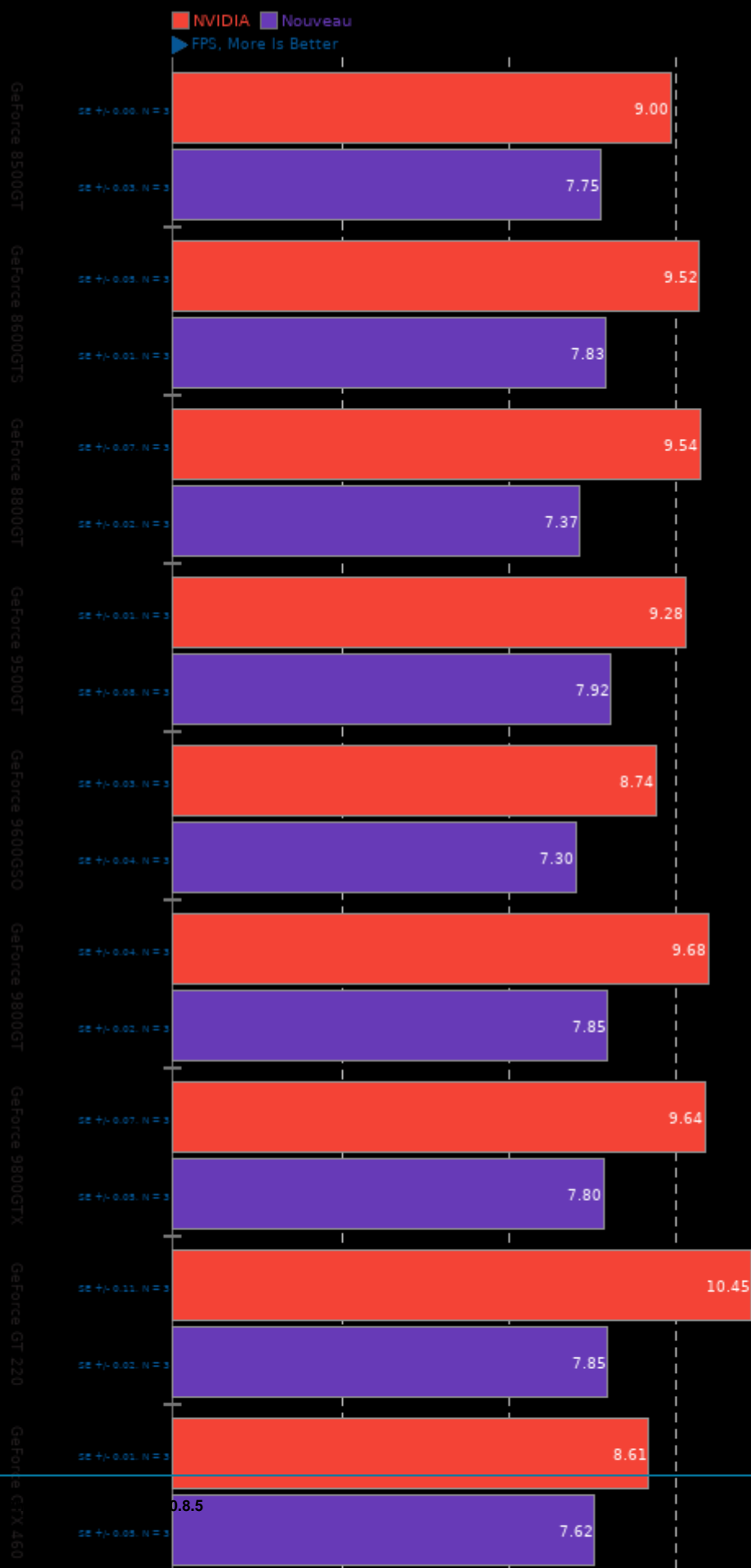
Cairo Performance Demos 2012-01-30

Demo: Gears



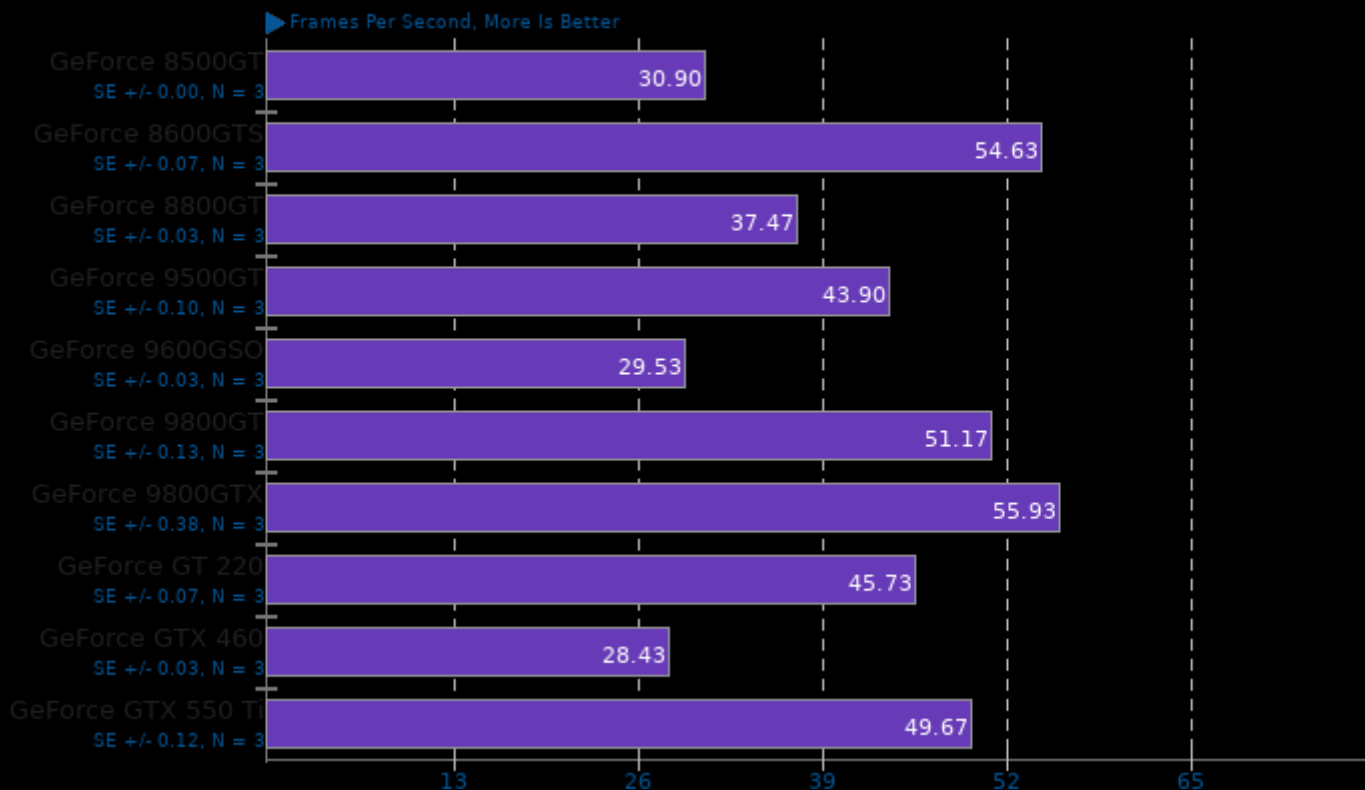
Cairo Performance Demos 2012-01-30

Demo: Charts



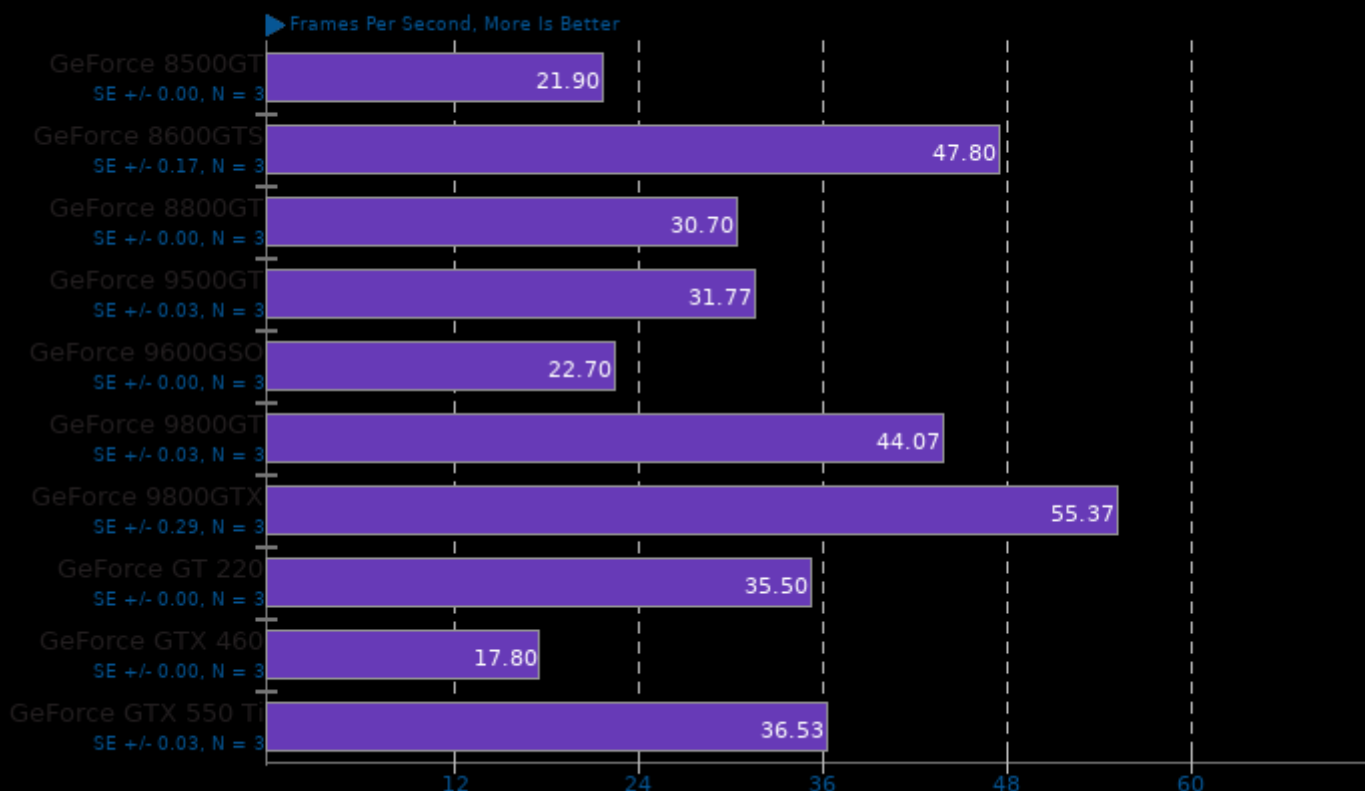
Doom 3 1.3.1

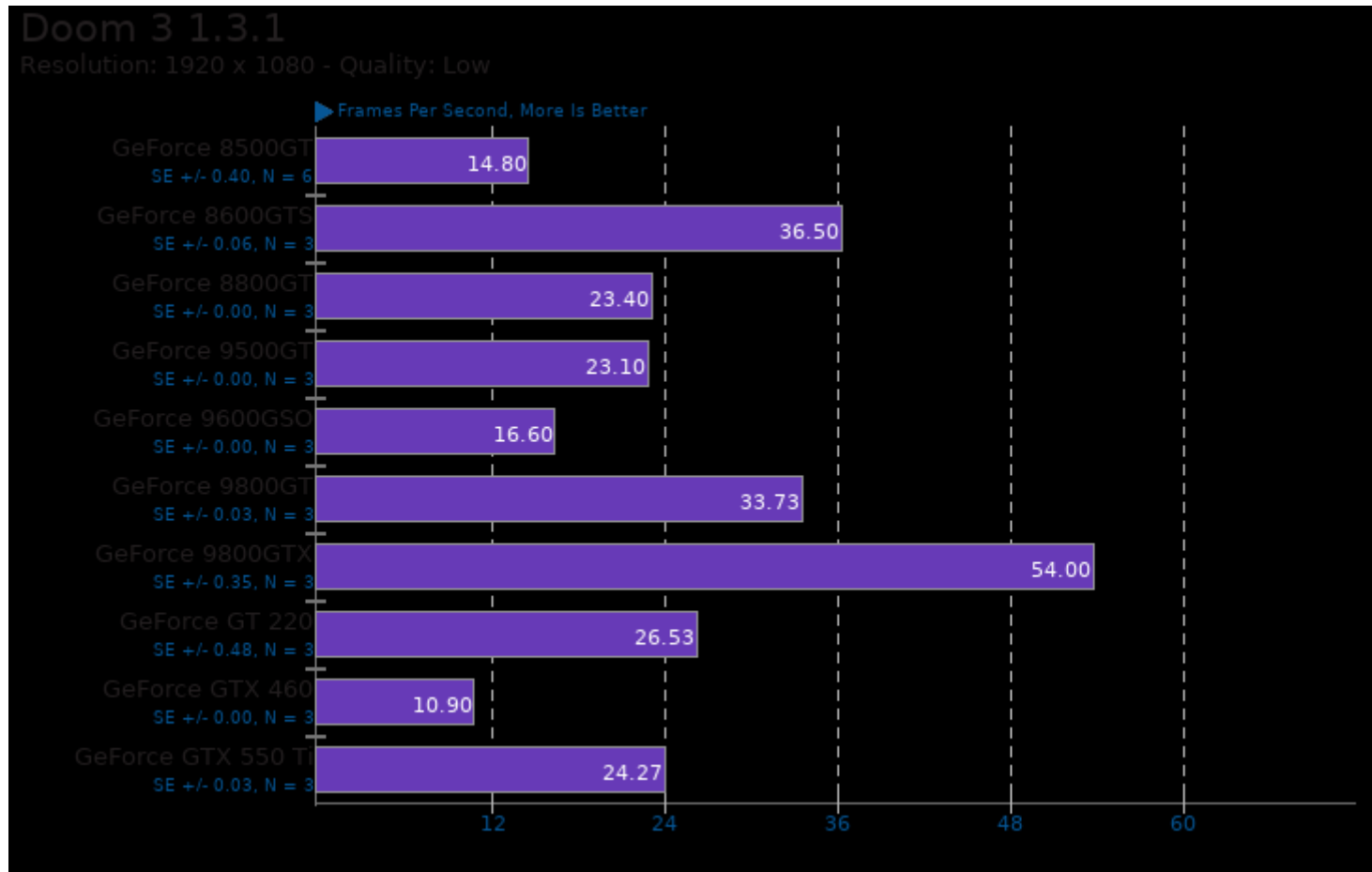
Resolution: 1024 x 768 - Quality: Low



Doom 3 1.3.1

Resolution: 1280 x 1024 - Quality: Low





This file was automatically generated via the Phoronix Test Suite benchmarking software on Sunday, 19 January 2025 03:57.