

www.phoronix-test-suite.com

SteamOS 2.0 vs. Ubuntu 15.10 - NVIDIA Linux

NVIDIA Linux graphics card benchmarks by Michael Larabel for a future article on Phoronix.com of SteamOS 2.0 Brewmaster tests with various Steam Linux games then compared to Ubuntu 15.10.

Automated Executive Summary

SteamOS + NVIDIA 352.30: GTX 980 Ti had the most wins, coming in first place for 33% of the tests.

Based on the geometric mean of all complete results, the fastest (SteamOS + NVIDIA 352.30: GTX 980 Ti) was 1.175x the speed of the slowest (Ubuntu 15.10 + NVIDIA 358.09: GTX 950). SteamOS + NVIDIA 352.30: GTX 780 Ti was 1.099x the speed of SteamOS + NVIDIA 352.30: GTX 680, SteamOS + NVIDIA 352.30: GTX 950 was 0.877x the speed of SteamOS + NVIDIA 352.30: GTX 780 Ti, SteamOS + NVIDIA 352.30: GTX 980 Ti was 1.161x the speed of SteamOS + NVIDIA 352.30: GTX 950, Ubuntu 15.10 + NVIDIA 358.09: GTX 680 was 0.888x the speed of SteamOS + NVIDIA 352.30: GTX 980 Ti, Ubuntu 15.10 + NVIDIA 358.09: GTX 780 Ti was 1.108x the speed of Ubuntu 15.10 + NVIDIA 358.09: GTX 680, Ubuntu 15.10 + NVIDIA 358.09: GTX 950 was 0.866x the speed of Ubuntu 15.10 + NVIDIA 358.09: GTX 780 Ti, Ubuntu 15.10 + NVIDIA 358.09: GTX 980 Ti was 1.166x the speed of Ubuntu 15.10 + NVIDIA 358.09: GTX 950.

Test Systems:

SteamOS + NVIDIA 352.30: GTX 680

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Haswell-E DMI2, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 680 2048MB (1006/3004MHz), Audio: Intel Wellsburg HD Audio, Network: Intel Connection

OS: SteamOS 2.0, Kernel: 3.18.0-trunk+steamos3-amd64 (x86_64), Desktop: GNOME Shell 3.14.4, Display Server: X Server 1.16.4, Display Driver: NVIDIA 352.30, OpenGL: 4.4.0, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1920x1080

SteamOS + NVIDIA 352.30: GTX 780 Ti

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Haswell-E DMI2, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 780 Ti 3072MB (875/3500MHz), Audio: Intel Wellsburg HD Audio, Network: Intel Connection

OS: SteamOS 2.0, Kernel: 3.18.0-trunk+steamos3-amd64 (x86_64), Desktop: GNOME Shell 3.14.4, Display Server: X Server 1.16.4, Display Driver: NVIDIA 352.30, OpenGL: 4.4.0, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1920x1080

SteamOS + NVIDIA 352.30: GTX 950

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Haswell-E DMI2, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: Device 2048MB (1202/3304MHz), Audio: Intel Wellsburg HD Audio, Network: Intel Connection

OS: SteamOS 2.0, Kernel: 3.18.0-trunk+steamos3-amd64 (x86_64), Desktop: GNOME Shell 3.14.4, Display Server: X Server 1.16.4, Display Driver: NVIDIA 352.30, OpenGL: 4.4.0, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1920x1080

SteamOS + NVIDIA 352.30: GTX 980 Ti

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Haswell-E DMI2, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 980 Ti 6144MB (999/3505MHz), Audio: Intel Wellsburg HD Audio, Network: Intel Connection

OS: SteamOS 2.0, Kernel: 3.18.0-trunk+steamos3-amd64 (x86_64), Desktop: GNOME Shell 3.14.4, Display Server: X Server 1.16.4, Display Driver: NVIDIA 352.30, OpenGL: 4.4.0, Compiler: GCC 4.9.2, File-System: ext4, Screen Resolution: 1920x1080

Ubuntu 15.10 + NVIDIA 358.09: GTX 680

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Xeon E7

v3/Xeon, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 680 2048MB (1006/3004MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 15.10, Kernel: 4.2.0-16-generic (x86_64), Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: NVIDIA 358.09, OpenGL: 4.4.0, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: intel_pstate powersave

Ubuntu 15.10 + NVIDIA 358.09: GTX 780 Ti

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Xeon E7 v3/Xeon, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 780 Ti 3072MB (875/3500MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 15.10, Kernel: 4.2.0-16-generic (x86_64), Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: NVIDIA 358.09, OpenGL: 4.4.0, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: intel_pstate powersave

Ubuntu 15.10 + NVIDIA 358.09: GTX 950

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Xeon E7 v3/Xeon, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: eVGA NVIDIA GeForce GTX 950 2048MB (1202/3304MHz), Audio: Realtek ALC1150, Network: Intel Connection

OS: Ubuntu 15.10, Kernel: 4.2.0-16-generic (x86_64), Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: NVIDIA 358.09, OpenGL: 4.4.0, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: intel_pstate performance

Ubuntu 15.10 + NVIDIA 358.09: GTX 980 Ti

Processor: Intel Core i7-5960X @ 3.50GHz (16 Cores), Motherboard: Gigabyte X99-UD4-CF, Chipset: Intel Xeon E7 v3/Xeon, Memory: 16384MB, Disk: 240GB OCZ VERTEX3, Graphics: NVIDIA GeForce GTX 980 Ti 6144MB (999/3505MHz), Audio: Realtek ALC1150, Network: Intel Connection

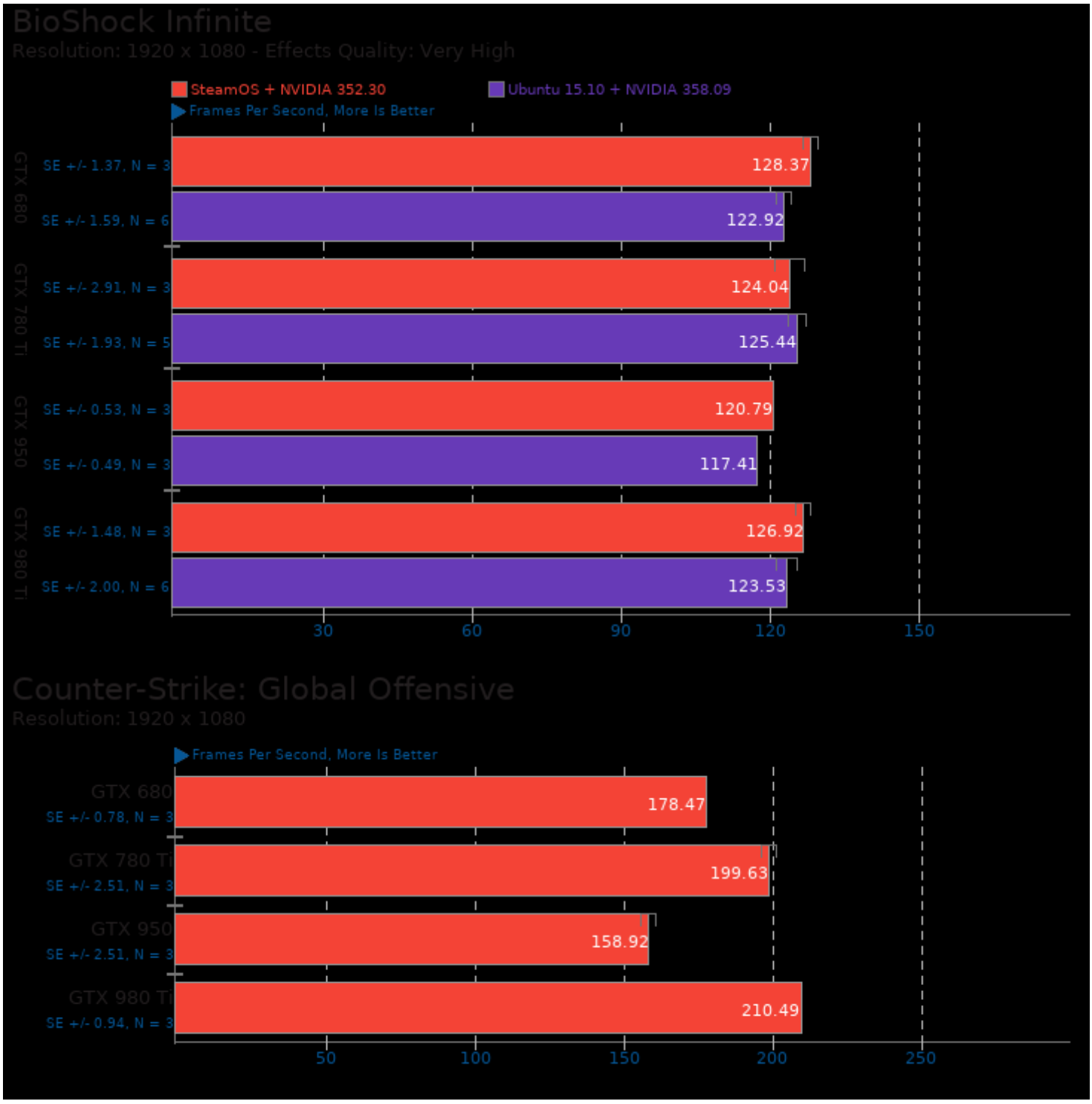
OS: Ubuntu 15.10, Kernel: 4.2.0-16-generic (x86_64), Desktop: Unity, Display Server: X Server 1.17.2, Display Driver: NVIDIA 358.09, OpenGL: 4.4.0, Compiler: GCC 5.2.1 20151010, File-System: ext4, Screen Resolution: 1920x1080

Processor Notes: Scaling Governor: intel_pstate powersave

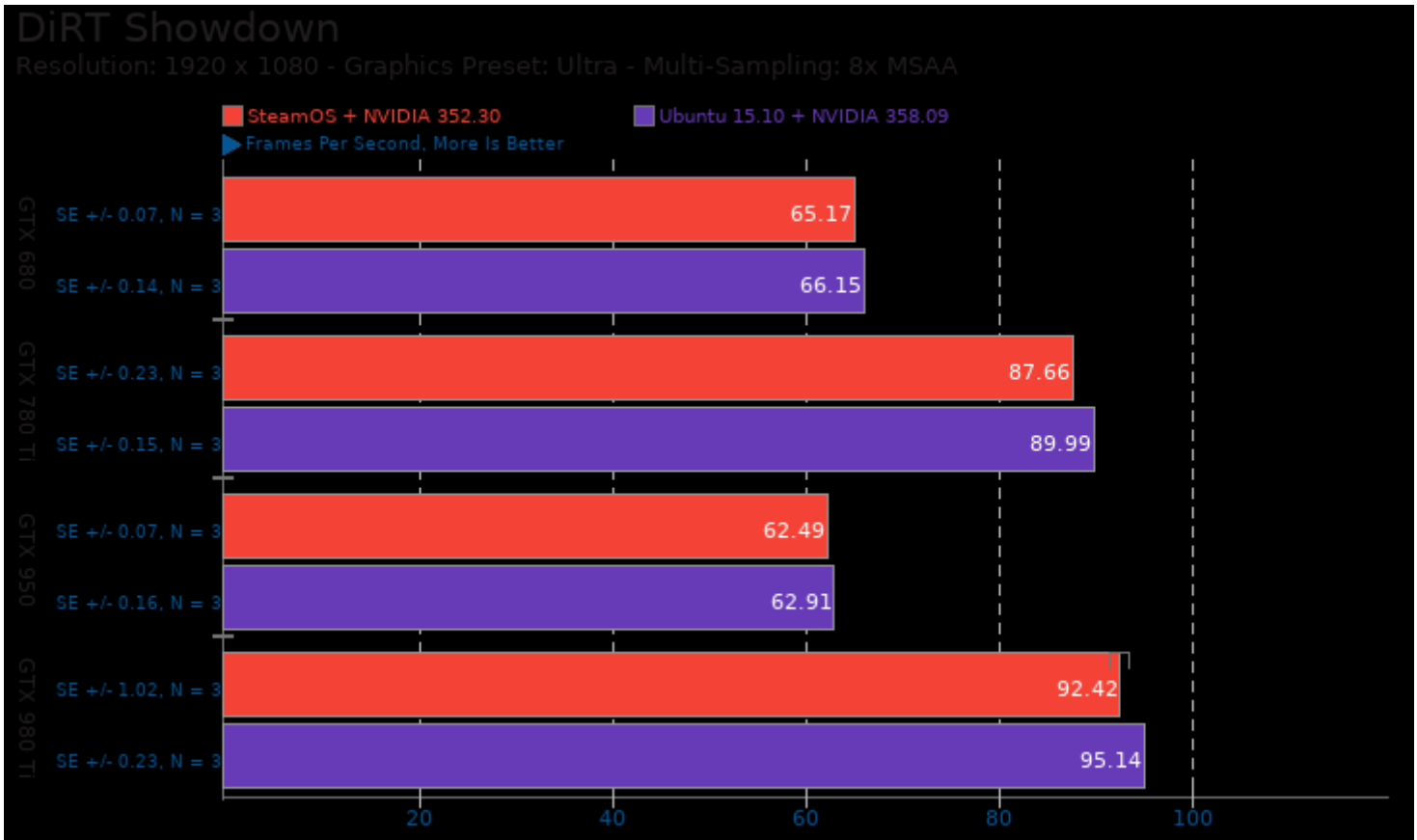
SteamOS 2.0 vs. Ubuntu 15.10 - NVIDIA Linux

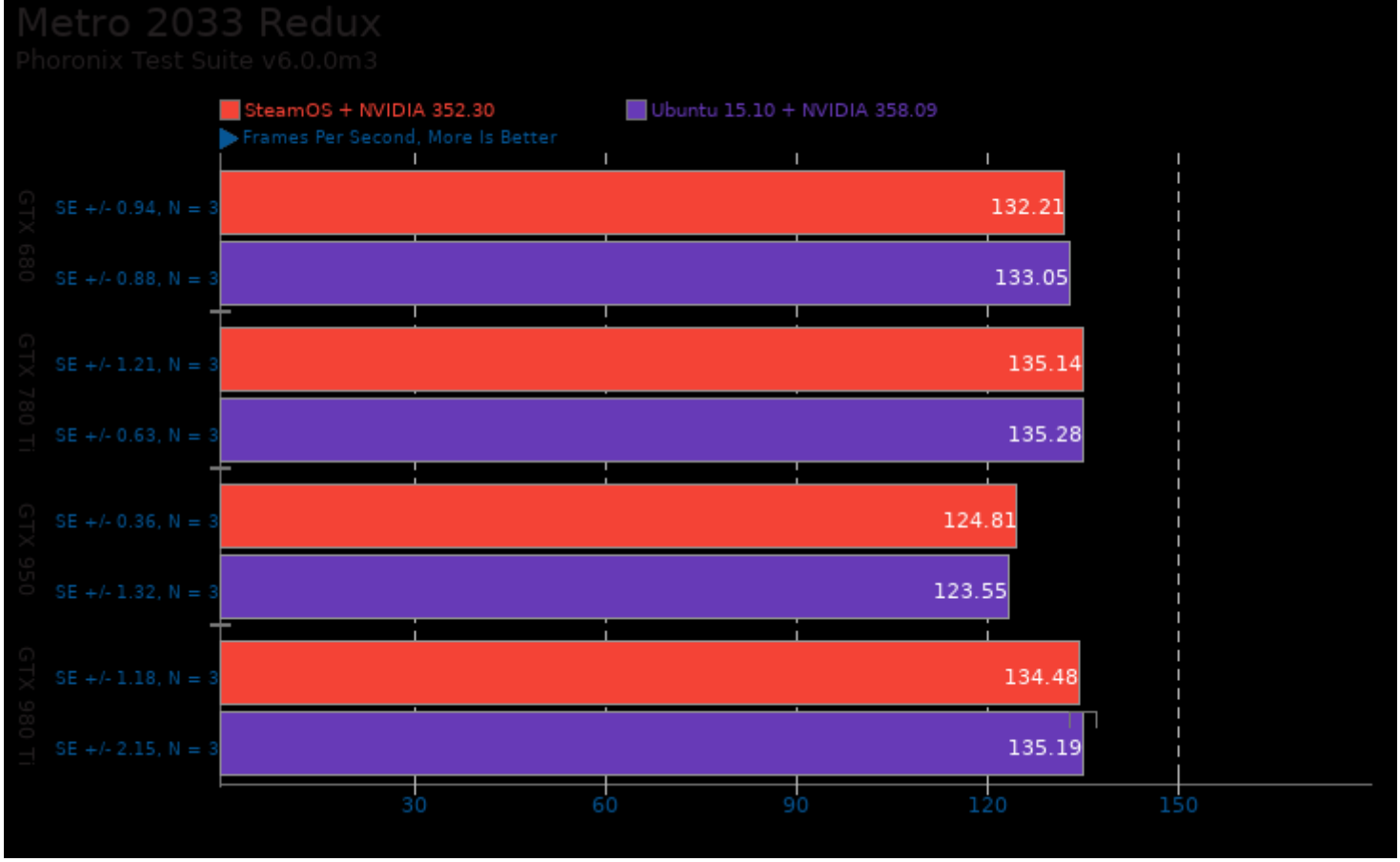
	SteamOS + NVIDIA 352.30: GTX 680	SteamOS + NVIDIA 352.30: GTX 780 Ti	SteamOS + NVIDIA 352.30: GTX 950	SteamOS + NVIDIA 352.30: GTX 980 Ti	Ubuntu 15.10 + NVIDIA 358.09: GTX 680	Ubuntu 15.10 + NVIDIA 358.09: GTX 780 Ti	Ubuntu 15.10 + NVIDIA 358.09: GTX 950	Ubuntu 15.10 + NVIDIA 358.09: GTX 980 Ti
BioShock Infinite - 1920 x 1080 - Very High	**128.37**	124.04	120.79	126.92	122.92	125.44	**117.41**	123.53
Normalized	100%	96.63%	94.1%	98.87%	95.75%	97.72%	91.46%	96.23%
Standard Deviation	1.9%	4.1%	0.8%	2%	3.2%	3.4%	0.7%	4%
Counter-Strike: Global Offensive - 1920 x 1080 (FPS)	178.47	199.63	**158.92**	**210.49**				
Normalized	84.79%	94.84%	75.5%	100%				
Standard Deviation	0.8%	2.2%	2.7%	0.8%				
DiRT Showdown - 1920 x 1080 - Ultra - 8x MSAA (FPS)	65.17	87.66	**62.49**	92.42	66.15	89.99	62.91	**95.14**
Normalized	68.5%	92.14%	65.68%	97.14%	69.53%	94.59%	66.12%	100%
Standard Deviation	0.2%	0.5%	0.2%	1.9%	0.4%	0.3%	0.4%	0.4%
Metro 2033 Redux - P.T.S.v.0.0 (FPS)	132.21	135.14	124.81	134.48	133.05	**135.28**	**123.55**	135.19
Normalized	97.73%	99.9%	92.26%	99.41%	98.35%	100%	91.33%	99.93%
Standard Deviation	1.2%	1.6%	0.5%	1.5%	1.1%	0.8%	1.8%	2.8%
Metro: Last Light Redux - P.T.S.v.0.0	130.07	154.57	124.77	153.30	129.41	154.73	**124.39**	**155.58**
Normalized	83.6%	99.35%	80.2%	98.53%	83.18%	99.45%	79.95%	100%
Standard Deviation	0.7%	1.6%	0.3%	1%	0.3%	1.6%	0.4%	1.8%
Team Fortress 2 - 1920 x 1080 (FPS)	112.20	113.87	114.06	**117.06**	111.36	110.31	111.56	**110.20**
Normalized	95.85%	97.27%	97.44%	100%	95.13%	94.23%	95.3%	94.14%
Standard Deviation	5.3%	7.3%	6.5%	4.3%	6.4%	8.4%	6.2%	2.9%

SteamOS 2.0 vs. Ubuntu 15.10 - NVIDIA Linux

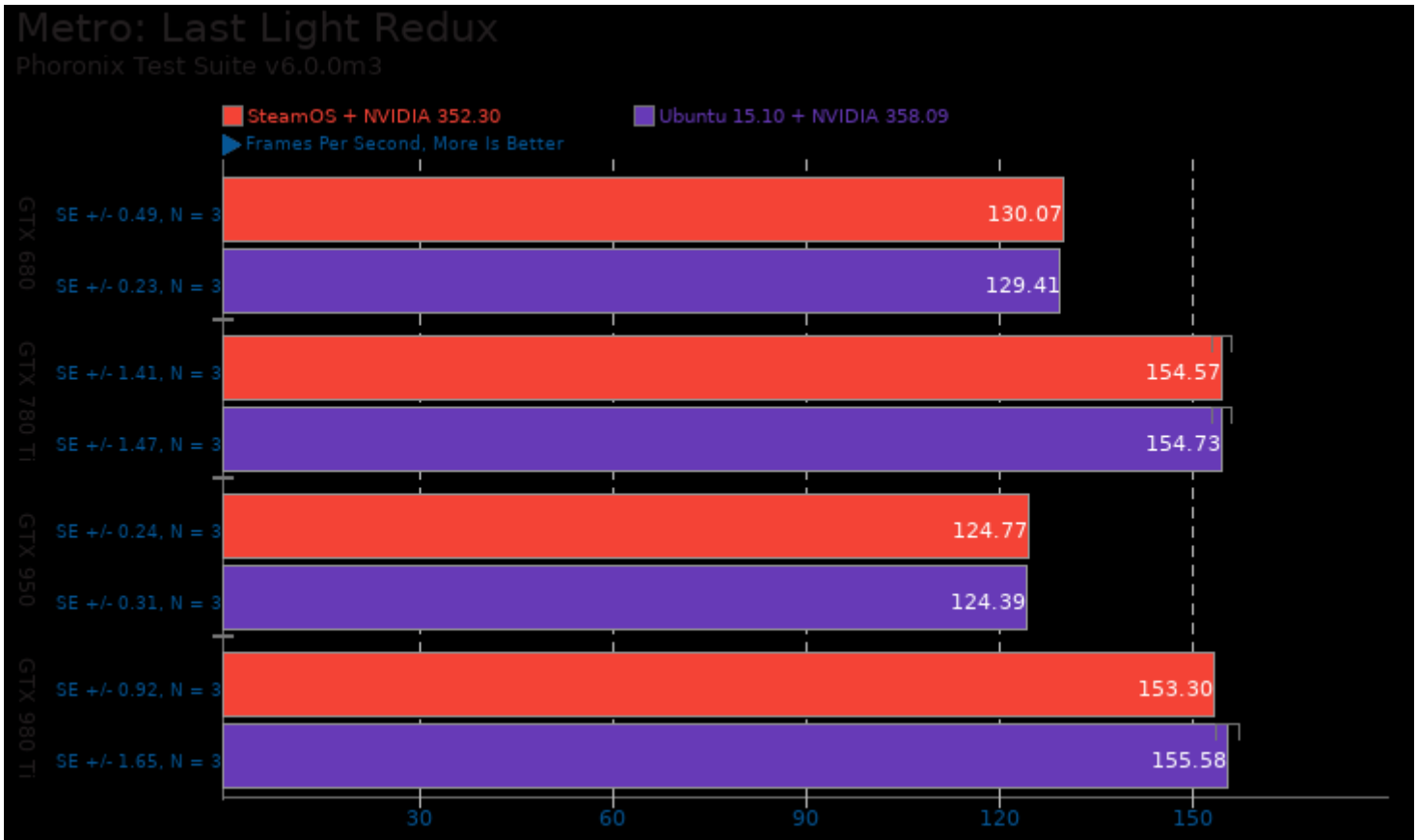


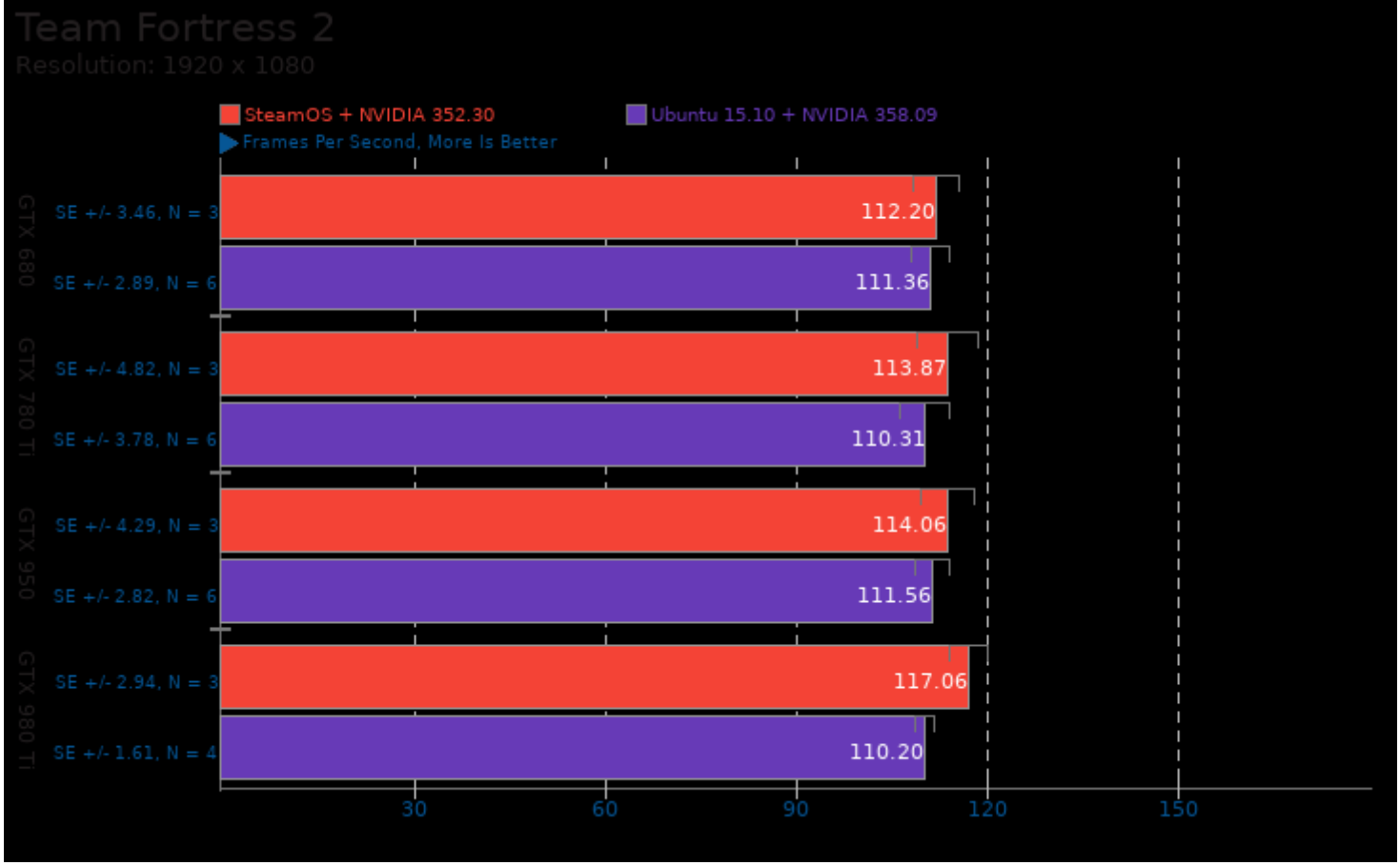
SteamOS 2.0 vs. Ubuntu 15.10 - NVIDIA Linux



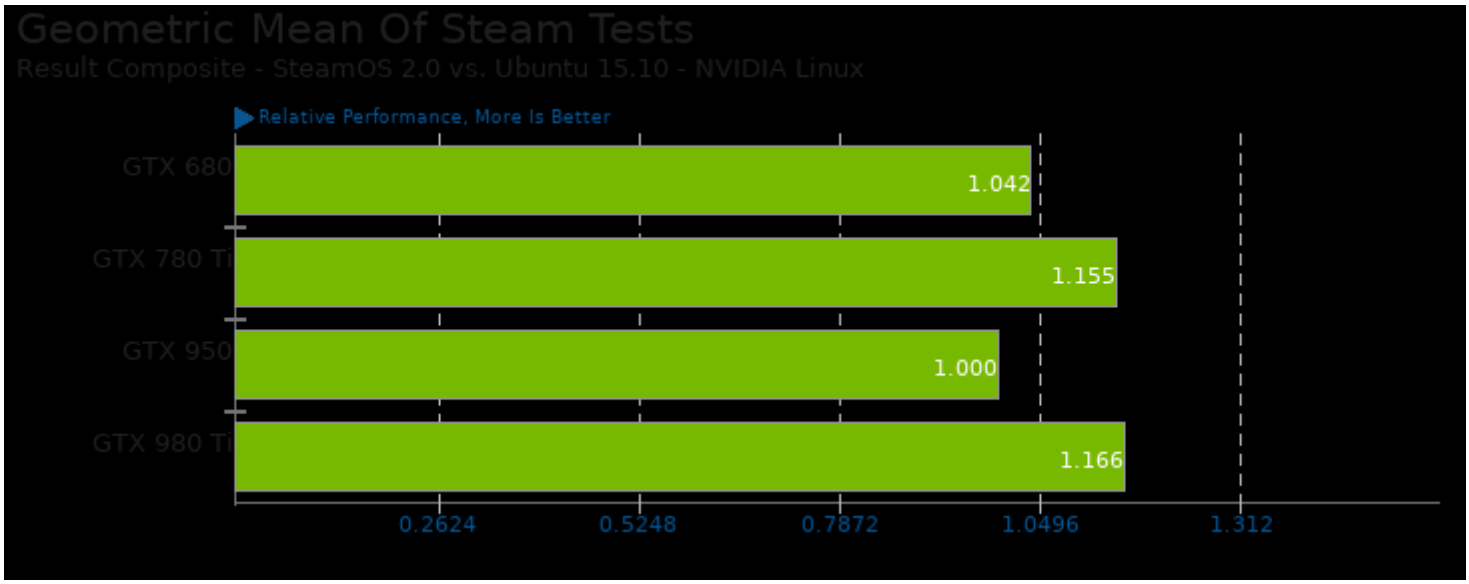


SteamOS 2.0 vs. Ubuntu 15.10 - NVIDIA Linux





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



Geometric mean based upon tests: pts/bioshock-infinite, pts/csgo, pts/dirt-showdown, pts/metro2033-redux, pts/metroll-redux and pts/tf2

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 10:46.