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1080p Feb 2021

Tests for a future article.

Automated Executive Summary

RX 6800 XT had the most wins, coming in first place for 53% of the tests.

Based on the geometric mean of all complete results, the fastest (RX 6800 XT) was 1.429x the speed of the slowest (RTX 2070 SUPER). RX 6800 was 0.925x the speed of RX 6800 XT, RTX 3080 was 0.973x the speed of RX 6800, RTX 2080 Ti was 0.947x the speed of RTX 3080, RTX 3060 Ti was 0.95x the speed of RTX 2080 Ti, Radeon VII was 0.93x the speed of RTX 3060 Ti, RTX 2080 SUPER was 0.978x the speed of Radeon VII, RX 5700 XT was 0.975x the speed of RTX 2080 SUPER, RTX 2070 SUPER was 0.976x the speed of RX 5700 XT.

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

Total War: Three Kingdoms (Resolution: 1920 x 1080 - Graphics Preset: Ultra - Scenario: Battle Benchmark - Total Frame Time) at 84.371x
HITMAN (Resolution: 1920 x 1080 - Quality Level: Ultra - Total Frame Time) at 53.766x
HITMAN 2 (Resolution: 1920 x 1080 - Quality Level: Ultra - Total Frame Time) at 22.167x
Total War: Three Kingdoms (Resolution: 1920 x 1080 - Graphics Preset: Ultra - Scenario: Battle Benchmark) at 2.214x
Unigine Superposition (Resolution: 1920 x 1080 - Mode: Fullscreen - Quality: Ultra - Renderer: OpenGL) at 2.032x
Unigine Superposition (Resolution: 1920 x 1080 - Mode: Fullscreen - Quality: High - Renderer: OpenGL) at 1.994x

Basemark GPU (Renderer: Vulkan - Resolution: 1920 x 1080 - Graphics Preset: High) at 1.892x
Unigine Heaven (Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL) at 1.857x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: TAA) at 1.797x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: SMAA) at 1.786x.

Test Systems:

RX 6800 XT

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: AMD SIENNA_CICHLID 16GB (2575/1000MHz), Audio: AMD Device ab28, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.11.0-051100rc5daily20210129-generic (x86_64) 20210128, Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: amd, OpenGL: 4.6 Mesa 21.1.0-devel (git-824ae64 2021-02-01 groovy-oibaf-ppa) (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
Graphics Notes: GLAMOR
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

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: AMD SIENNA_CICHLID 16GB (2475/1000MHz), Audio: AMD Device ab28, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.11.0-051100rc5daily20210129-generic (x86_64) 20210128, Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: amd, OpenGL: 4.6 Mesa 21.1.0-devel (git-824ae64 2021-02-01 groovy-oibaf-ppa) (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

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RX 5700 XT

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: AMD Radeon RX 5600 OEM/5600 XT / 5700/5700 8GB (2100/875MHz), Audio: AMD Navi 10 HDMI

Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.11.0-051100rc5daily20210129-generic (x86_64) 20210128, Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: amd, OpenGL: 4.6 Mesa 21.1.0-devel (git-824ae64 2021-02-01 groovy-oibaf-ppa) (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
Graphics Notes: GLAMOR
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

Radeon VII

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: AMD Radeon VII 16GB (1801/1000MHz), Audio: AMD Vega 20 HDMI Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.11.0-051100rc5daily20210129-generic (x86_64) 20210128, Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: amd, OpenGL: 4.6 Mesa 21.1.0-devel (git-824ae64 2021-02-01 groovy-oibaf-ppa) (LLVM 11.0.1), Vulkan: 1.2.145, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
Graphics Notes: GLAMOR
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 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: NVIDIA GeForce RTX 3080 10GB (1710/9501MHz), Audio: NVIDIA Device 1aef, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-41-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
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 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: NVIDIA GeForce RTX 3060 Ti 8GB (1665/7000MHz), Audio: NVIDIA Device 228b, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-41-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
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 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: NVIDIA GeForce RTX 2080 Ti 11GB (420/405MHz), Audio: NVIDIA TU102 HD Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-41-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
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 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: NVIDIA GeForce RTX 2070 SUPER 8GB (495/810MHz), Audio: NVIDIA TU104 HD Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-41-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009
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RTX 2080 SUPER

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: ASUS ROG CROSSHAIR VIII HERO (WI-FI) (3202 BIOS), Chipset: AMD Starship/Matisse, Memory: 32GB, Disk: 2000GB Corsair Force MP600 + 2000GB, Graphics: NVIDIA GeForce RTX 2080 SUPER 8GB (495/810MHz), Audio: NVIDIA TU104 HD Audio, Monitor: ASUS MG28U, Network: Realtek RTL8125 2.5GbE + Intel I211 + Intel Wi-Fi 6 AX200

OS: Ubuntu 20.10, Kernel: 5.8.0-41-generic (x86_64), Desktop: GNOME Shell 3.38.2, Display Server: X Server 1.20.9, Display Driver: NVIDIA 460.39, OpenGL: 4.6.0, OpenCL: OpenCL 1.2 CUDA 11.2.136, Vulkan: 1.2.155, Compiler: GCC 10.2.0 + Clang 11.0.1-1~oibaf~g, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201009

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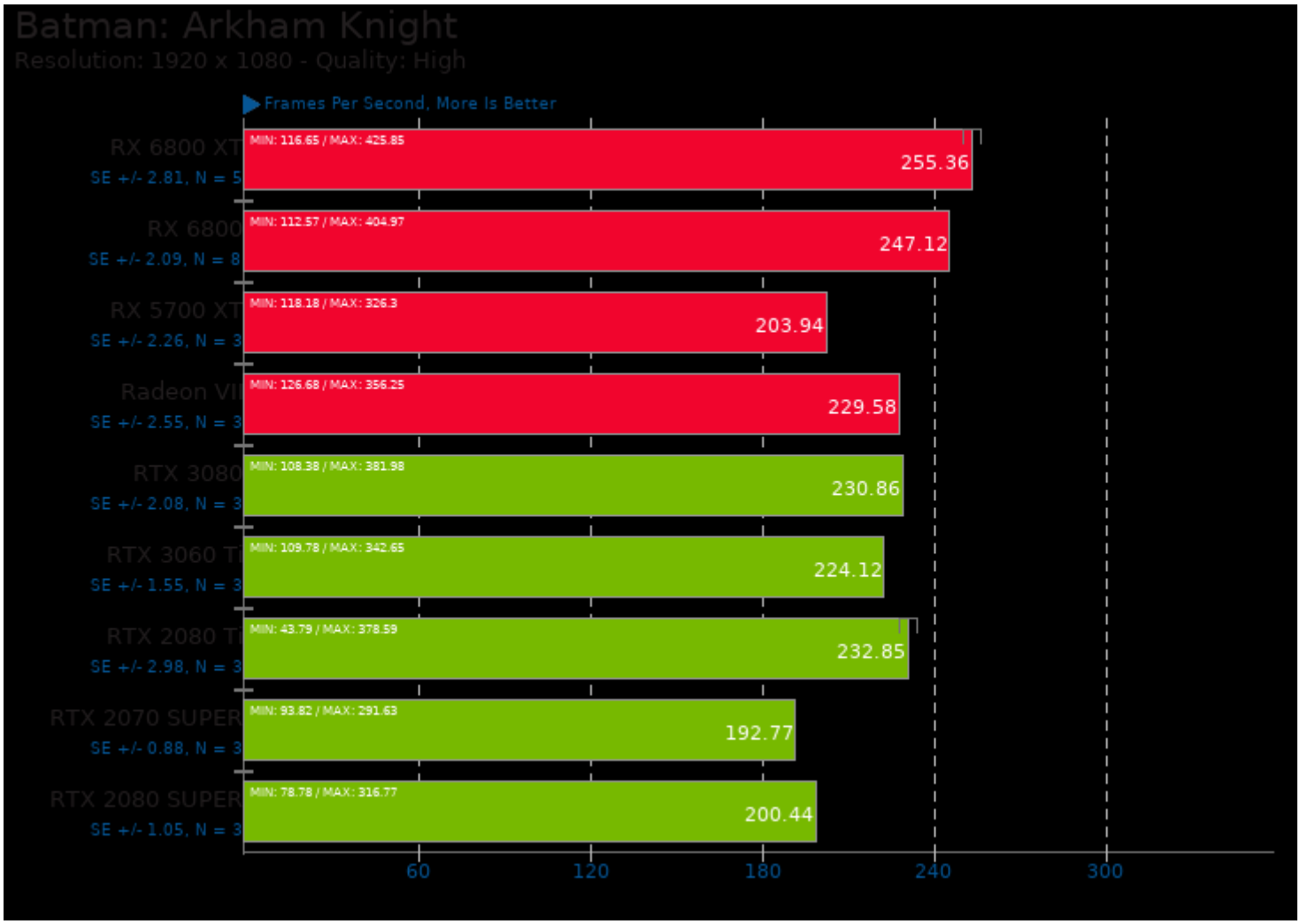
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	RX 6800 XT	RX 6800	RX 5700 XT	Radeon VII	RTX 3080	RTX 3060 Ti	RTX 2080 Ti	RTX 2070 SUPER	RTX 2080 SUPER
Batman: Arkham Knight - 1920 x 1080 - High (FPS)	**255.36**	247.12	203.94	229.58	230.86	224.12	232.85	**192.77**	200.44
Normalized	100%	96.77%	79.86%	89.9%	90.41%	87.77%	91.18%	75.49%	78.49%
Standard Deviation	2.5%	2.4%	1.9%	1.9%	1.6%	1.2%	2.2%	0.8%	0.9%
Dawn of War III - 1920 x 1080 - Ultra - OpenGL (FPS)	117.574255	118.764089	116.516543	117.219441	107.949941	**124.284798**	111.937281	108.369448	**107.274455**
Normalized	94.6%	95.56%	93.75%	94.32%	86.86%	100%	90.07%	87.19%	86.31%
Standard Deviation	2.5%	2.2%	2.4%	2.3%	0.8%	0.4%	2.3%	1.3%	1%
F1 2017 - 1920 x 1080 - Ultra High - TAA (FPS)	134	**131**	135	135	142	**163**	145	142	141
Normalized	82.21%	80.37%	82.82%	82.82%	87.12%	100%	88.96%	87.12%	86.5%
Standard Deviation			2.1%		5.6%	0.7%		2.5%	
HITMAN - 1920 x 1080 - Ultra (FPS)	118.65	**119.22**	115.46	118.47	101.29	111.35	105.02	**91.92**	95.73
Normalized	99.52%	100%	96.85%	99.37%	84.96%	93.4%	88.09%	77.1%	80.3%
Standard Deviation	1.1%	2.2%	0.8%	0.5%	0.2%	0.9%	0.6%	0.2%	0.4%
HITMAN 2 - 1920 x 1080 - Ultra (FPS)	126.67	124.25	124.01	126.74	117.92	**126.83**	126.16	**110.76**	115.54
Normalized	99.87%	97.97%	97.78%	99.93%	92.97%	100%	99.47%	87.33%	91.1%
Standard Deviation	1.3%	1.4%	0.4%	1.2%	1.4%	1%	0.1%	0.1%	0.3%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - TAA	**230.7**	199.7	131.5	139.7	196.1	156.4	177.7	**128.4**	144.8
Normalized	100%	86.56%	57%	60.55%	85%	67.79%	77.03%	55.66%	62.77%
Standard Deviation	0.5%	0.1%	0.1%	0.1%	0.2%	0%	0.1%	0.2%	0%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - SMAA	**230.1**	200.2	131.5	139.7	196.1	156.3	178.1	**128.8**	144.4
Normalized	100%	87.01%	57.15%	60.71%	85.22%	67.93%	77.4%	55.98%	62.76%
Standard Deviation	0.4%	0%	0%	0.1%	0.4%	0.1%	0.1%	0.3%	0.6%
Strange Brigade - 1920 x 1080 - Ultra (FPS)	**171.2**	173.0	174.4	171.7	173.6	**183.2**	174.9	178.8	172.4
Normalized	93.45%	94.43%	95.2%	93.72%	94.76%	100%	95.47%	97.6%	94.1%
Standard Deviation	2.1%	1.1%	0.8%	0.2%	0.6%	0.3%	0.2%	0.8%	1.1%

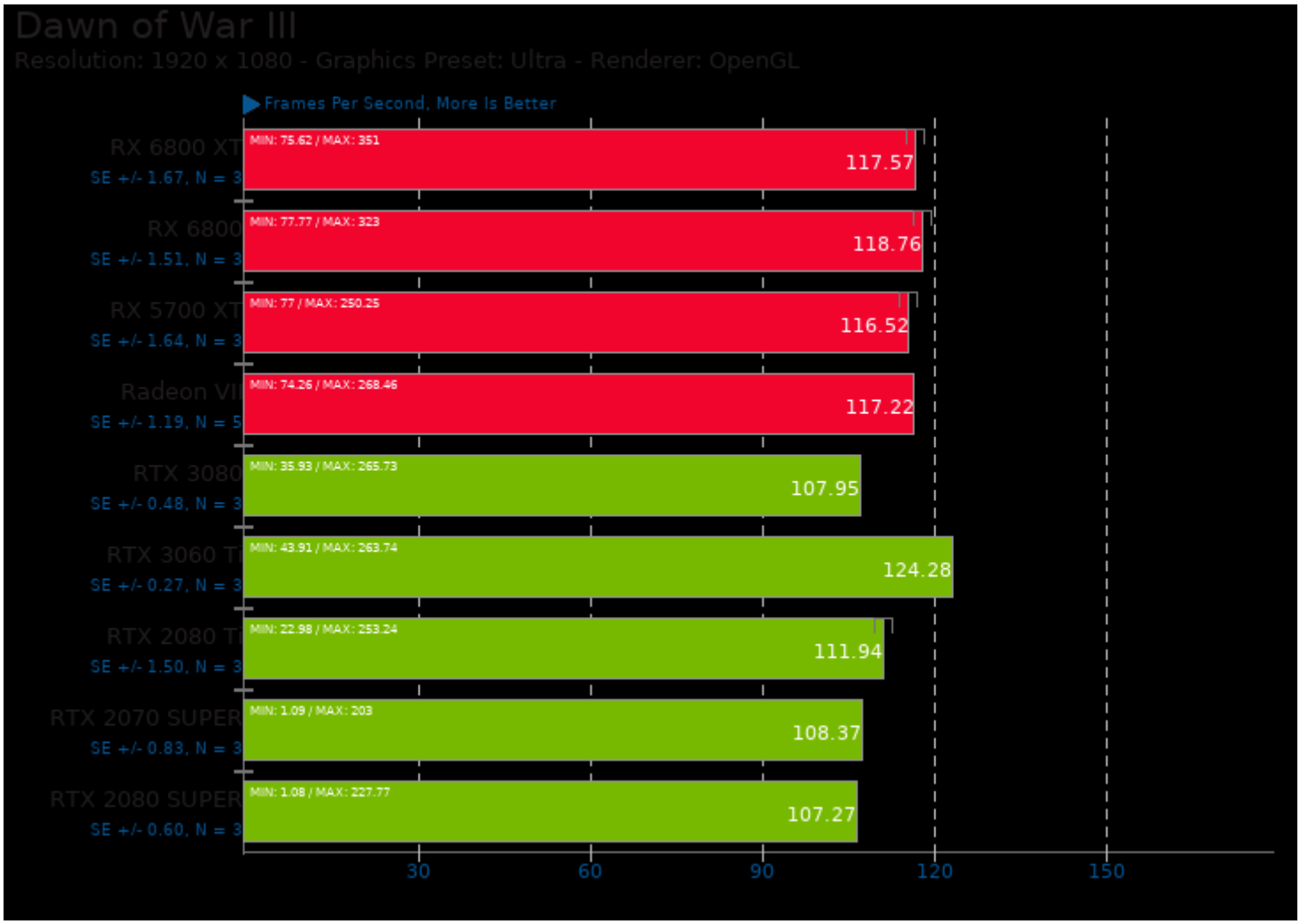
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The Talos Principle - Vulkan - 1920 x 1080 (FPS)	**376.7**	365.9	255.9	269.4	339.1	287.2	301.8	**241.1**	261.9
Normalized	100%	97.13%	67.93%	71.52%	90.02%	76.24%	80.12%	64%	69.52%
Standard Deviation	0.2%	0.3%	0.3%	0.2%	0.1%	0.2%	0.9%	1.2%	0.4%
Total War: Three Kingdoms - 1920 x 1080 - Ultra - Battle Benchmark (FPS)	**136.4**	117.5	73.8	79.5	74.4	65.1	80.5	**61.6**	65.6
Normalized	100%	86.14%	54.11%	58.28%	54.55%	47.73%	59.02%	45.16%	48.09%
Standard Deviation	1.2%	1.1%	1.1%	0.3%	0.8%	0.8%	0.2%	1.3%	0.7%
Unigine Heaven - 1920 x 1080 - Fullscreen - OpenGL (FPS)	**312.617**	281.826	**168.385**	183.569	269.812	214.991	240.548	197.278	214.069
Normalized	100%	90.15%	53.86%	58.72%	86.31%	68.77%	76.95%	63.11%	68.48%
Standard Deviation	0.1%	0.3%	0.3%	0%	2.4%	0.3%	4.9%	0.3%	1.2%
Unigine Superposition - 1920 x 1080 - Fullscreen - High - OpenGL (FPS)	**165.5**	139.7	**83**	86.0	141.4	104.0	122.9	90.1	99.5
Normalized	100%	84.41%	50.15%	51.96%	85.44%	62.84%	74.26%	54.44%	60.12%
Standard Deviation	0.1%	0%		0.1%	0.8%	0.1%	0.2%	0.1%	0.1%
Unigine Superposition - 1920 x 1080 - Fullscreen - Ultra - OpenGL (FPS)	**70.3**	57.9	**34.6**	37.8	67.7	48.0	55.2	38.1	41.6
Normalized	100%	82.36%	49.22%	53.77%	96.3%	68.28%	78.52%	54.2%	59.17%
Standard Deviation	0%	0%	0%	0.3%	0.1%	0.1%	0.1%	0.2%	0.1%
Unigine Valley - 1920 x 1080 - Fullscreen - OpenGL (FPS)	221.008	**222.769**	184.145	192.859	199.933	185.880	179.317	168.426	**155.953**
Normalized	99.21%	100%	82.66%	86.57%	89.75%	83.44%	80.49%	75.61%	70.01%
Standard Deviation	0.8%	0.6%	0.1%	0.4%	2.3%	0.2%	10.1%	1%	1.2%
Basemark GPU - Vulkan - 1920 x 1080 - High (FPS)	309.49	251.90	**205.13**	217.13	**388.07**	272.00	317.48	219.66	242.75
Normalized	79.75%	64.91%	52.86%	55.95%	100%	70.09%	81.81%	56.6%	62.55%
Standard Deviation	0.1%	0.7%	0.1%	0.2%	0.2%	0.1%	0.1%	0%	0.1%

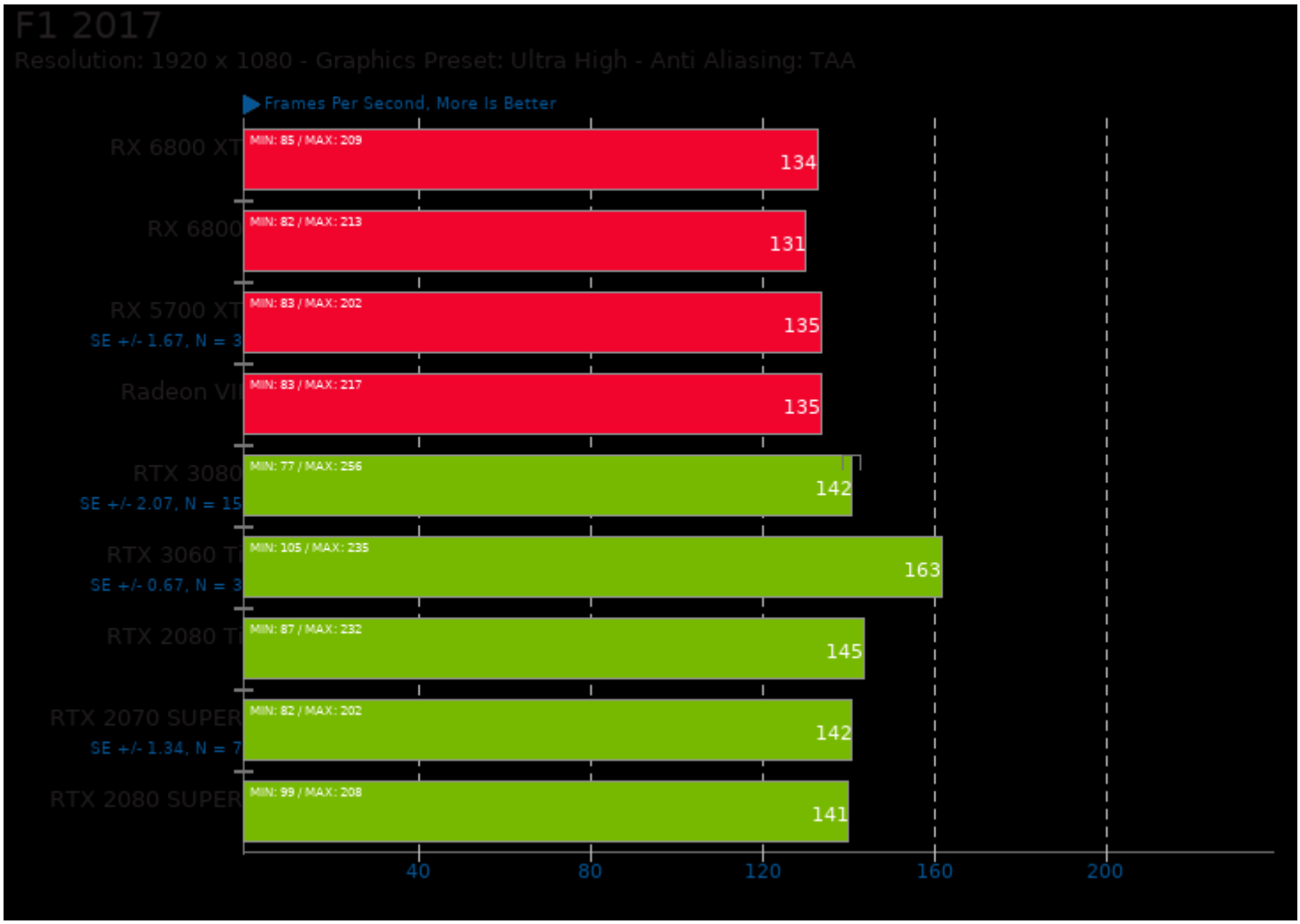
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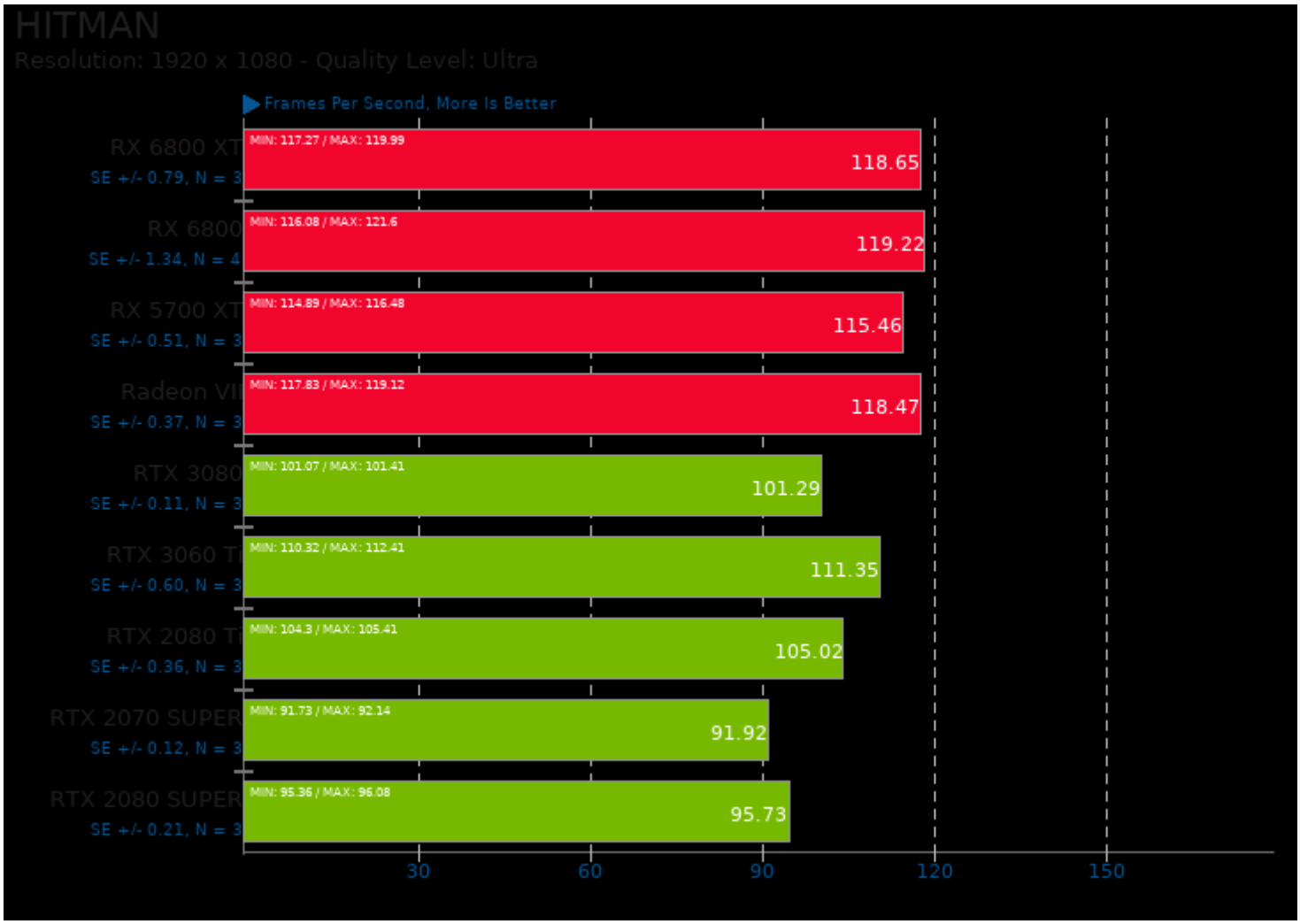
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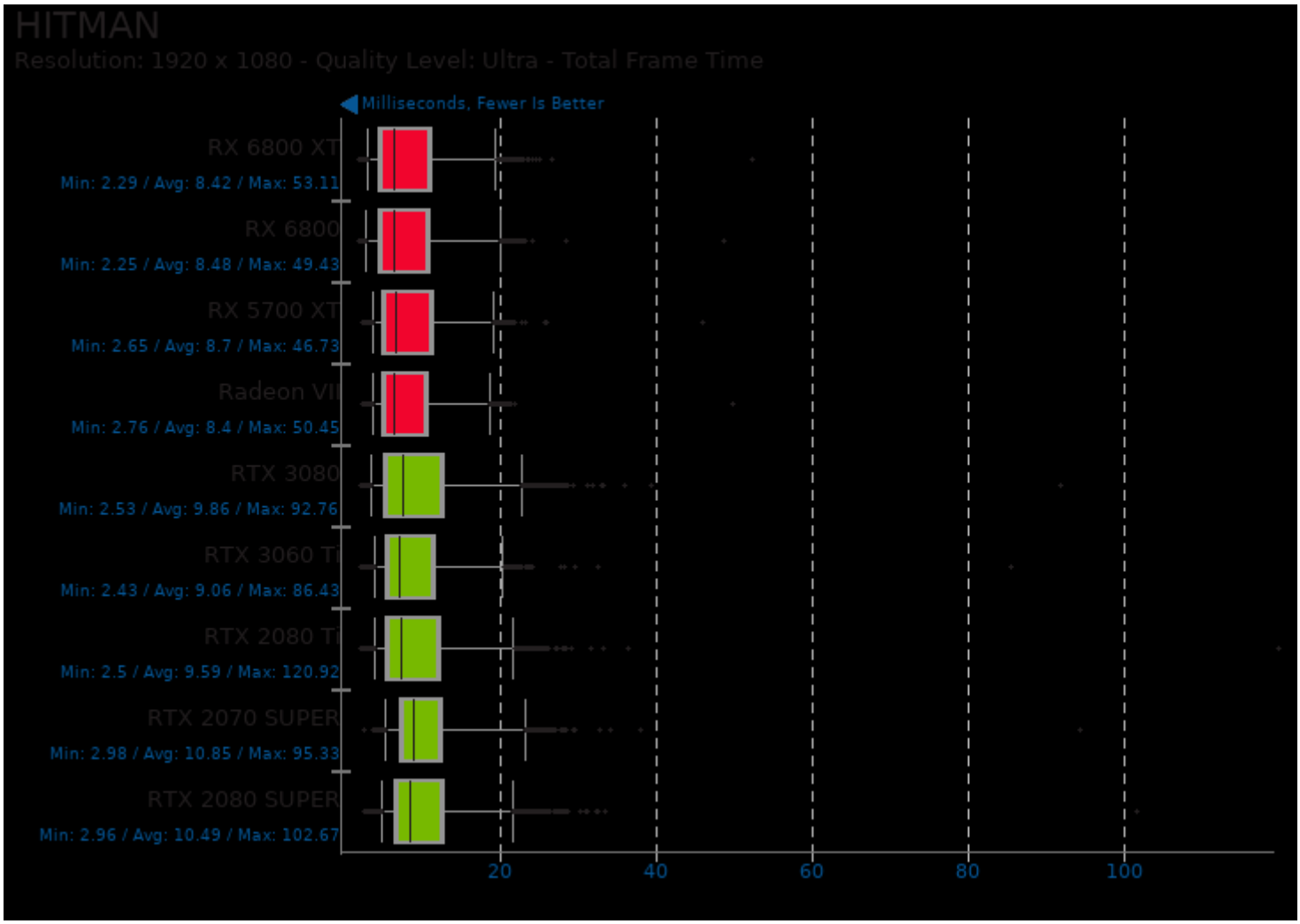
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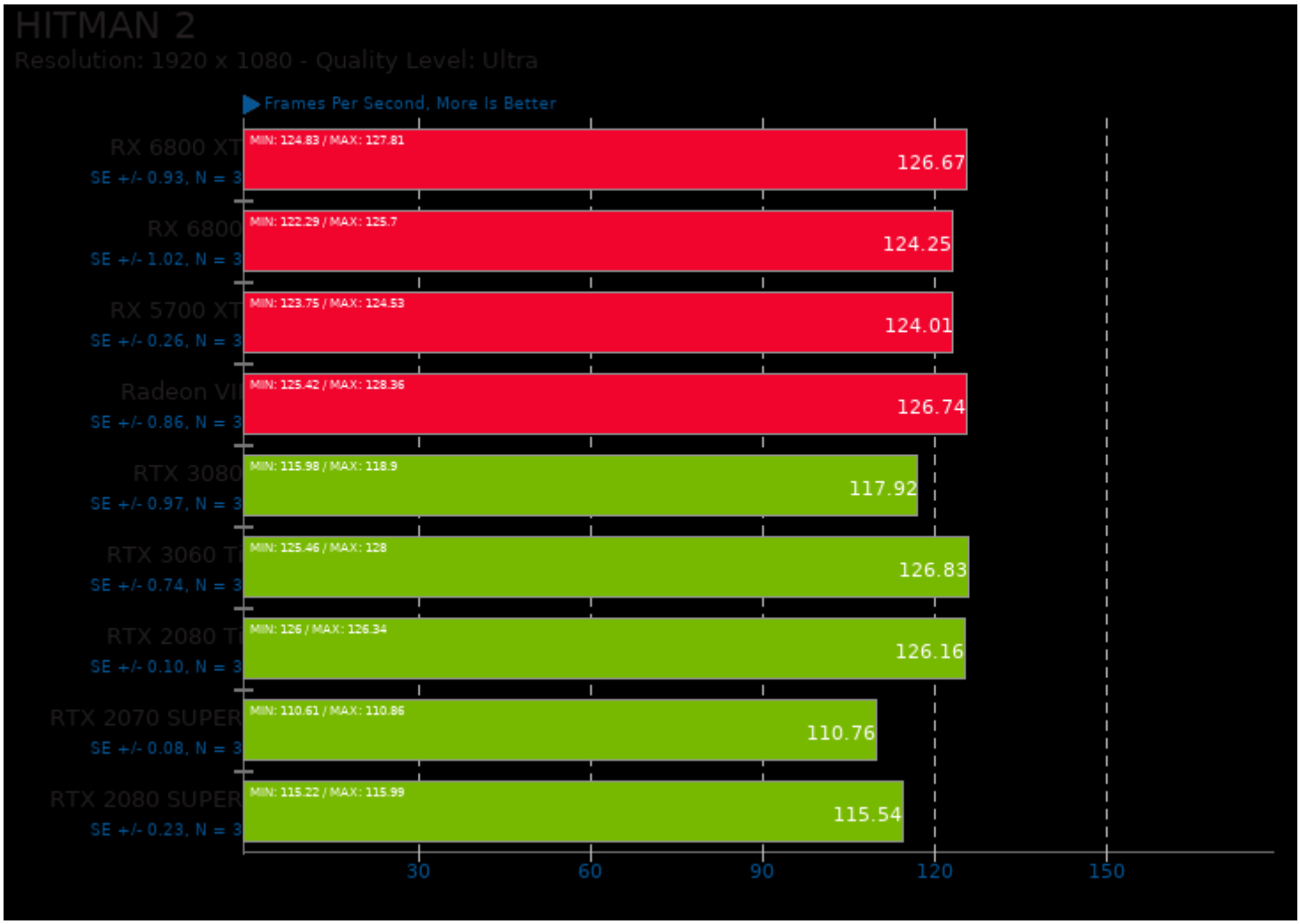
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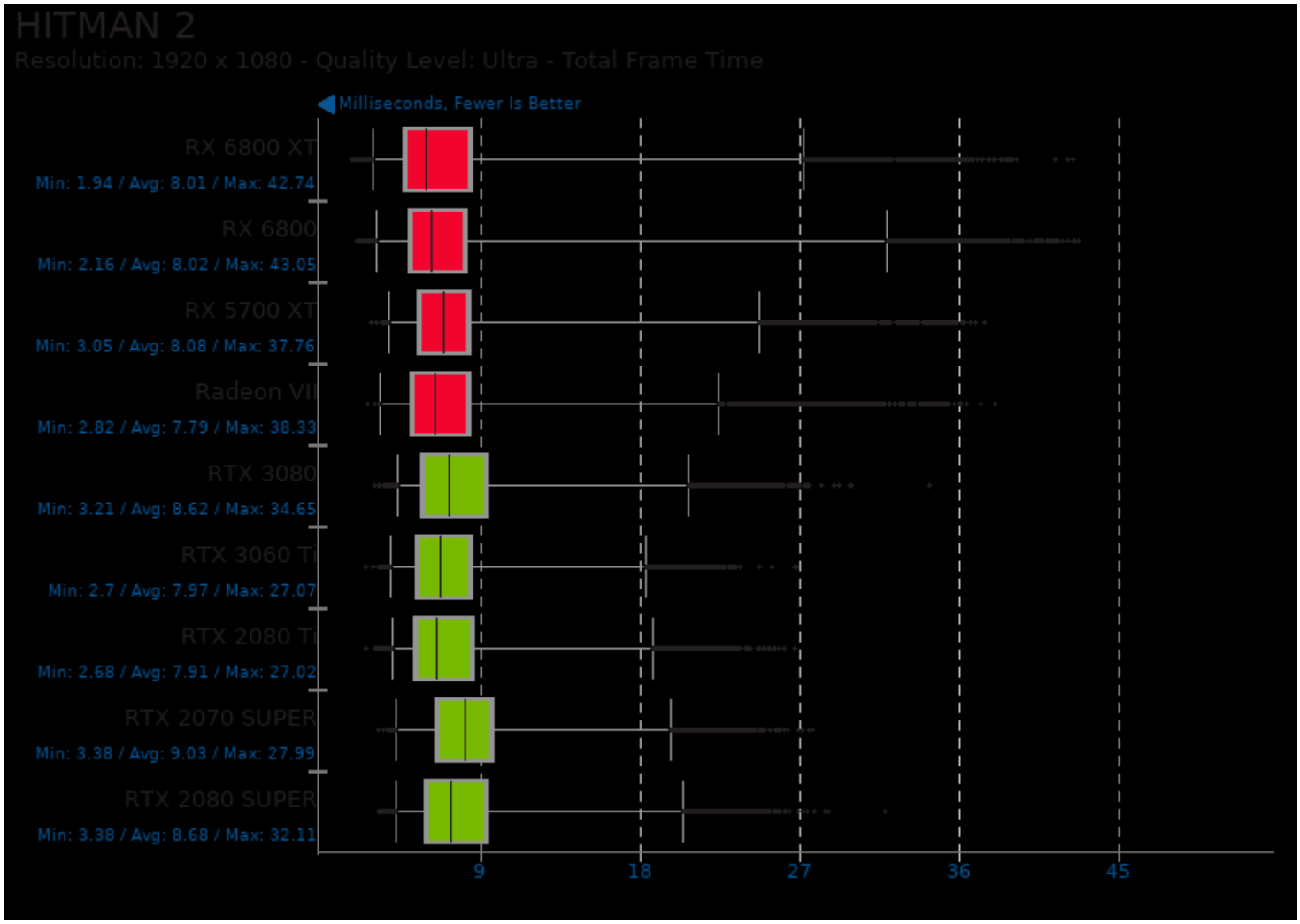
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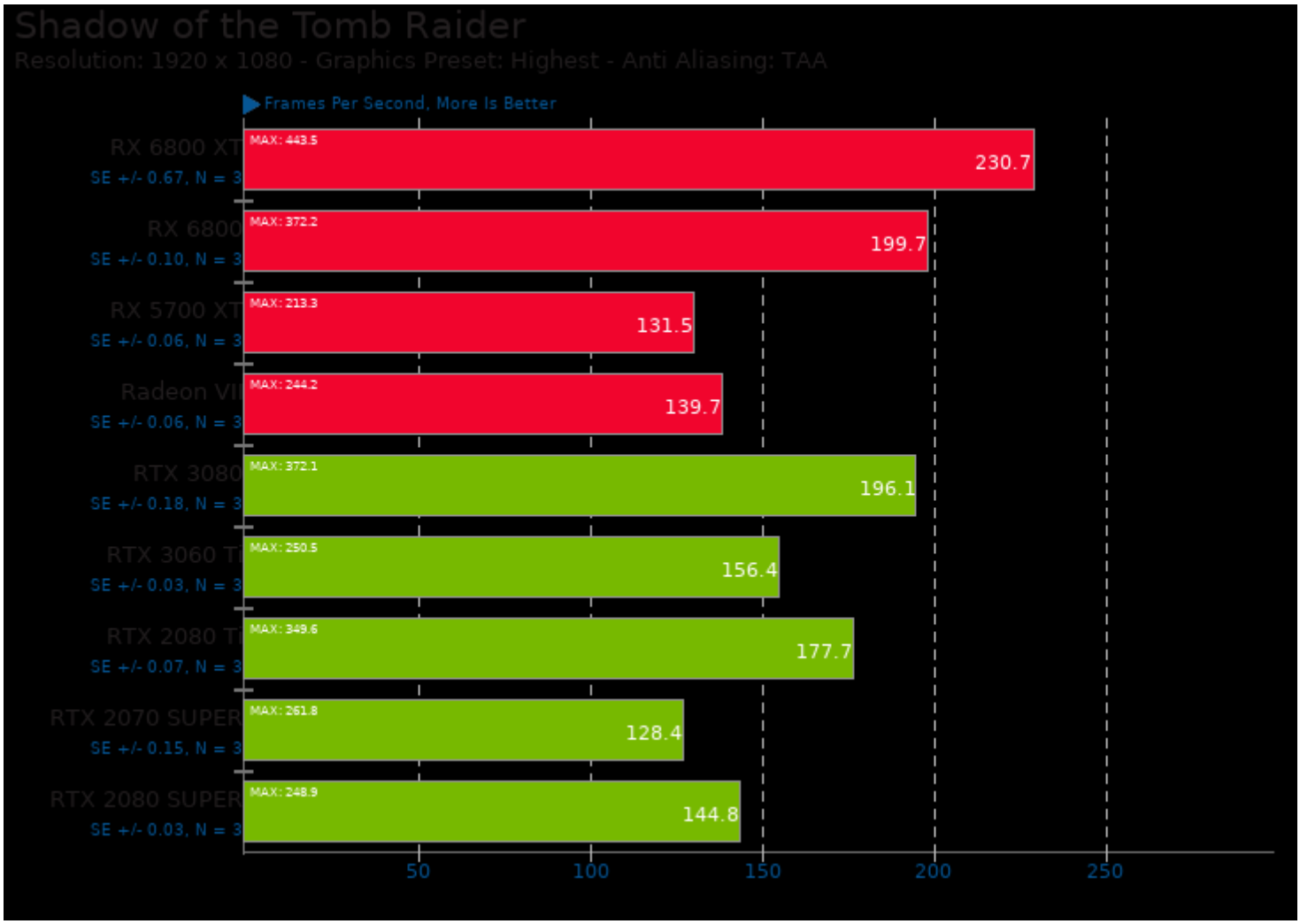
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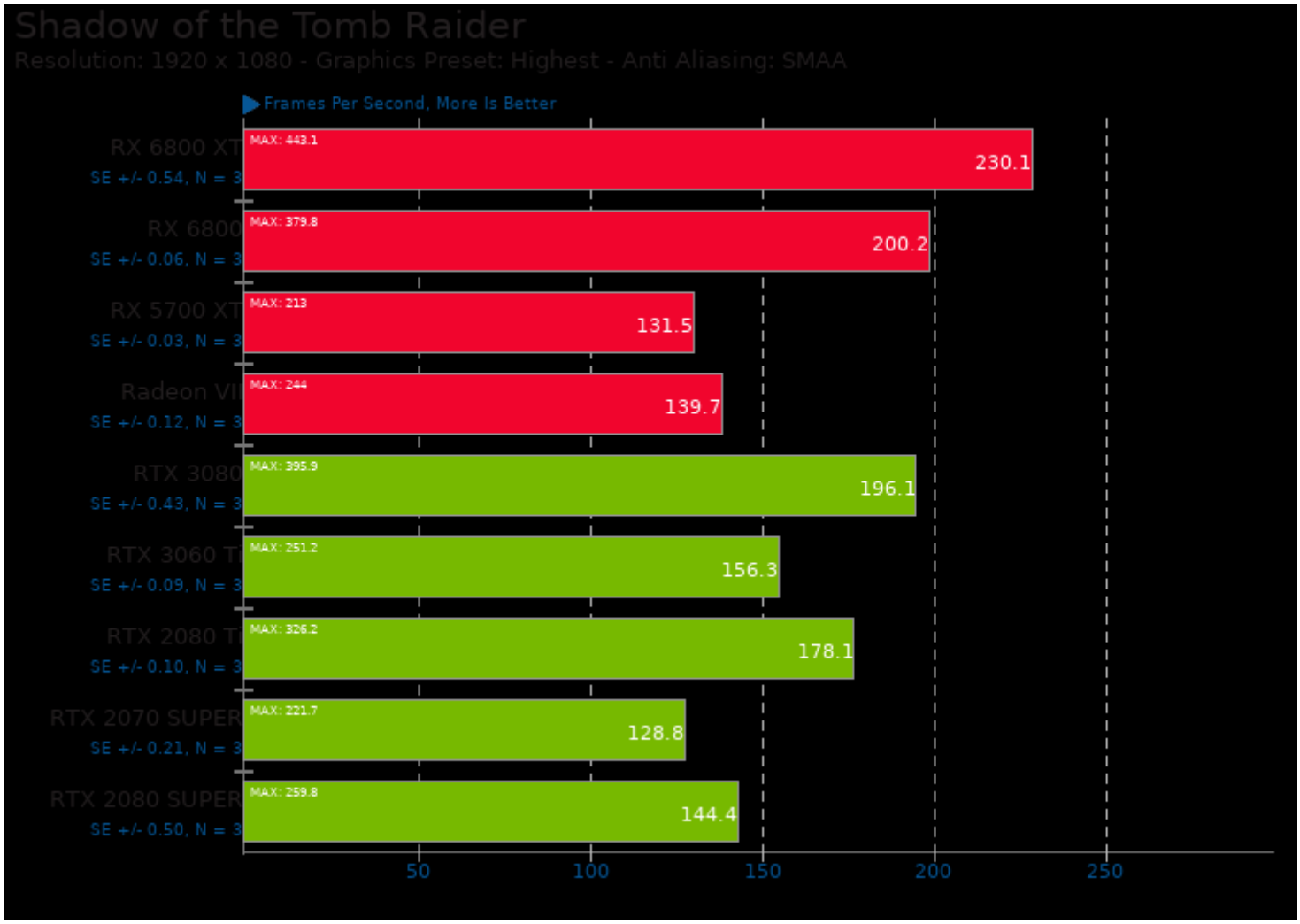
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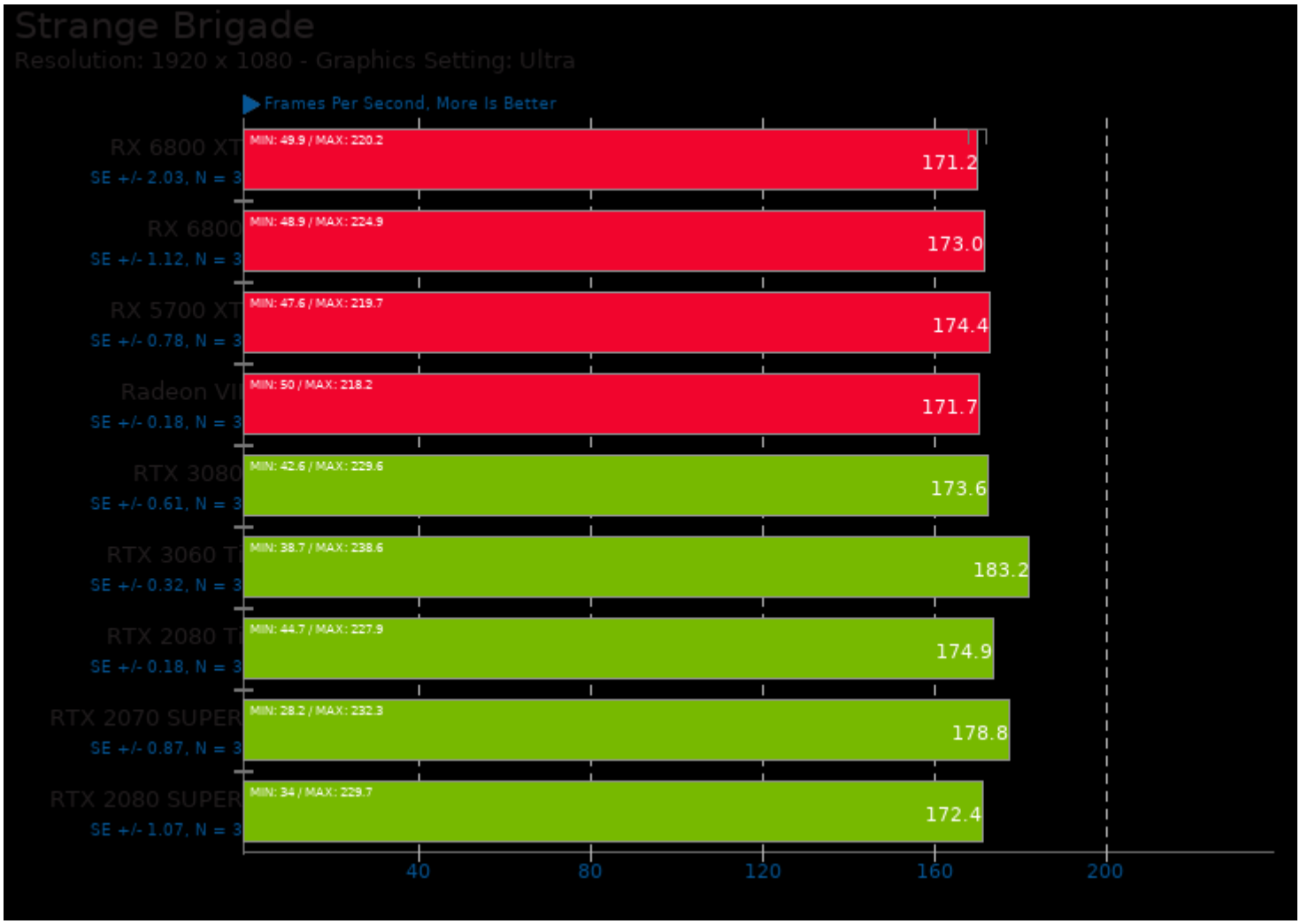
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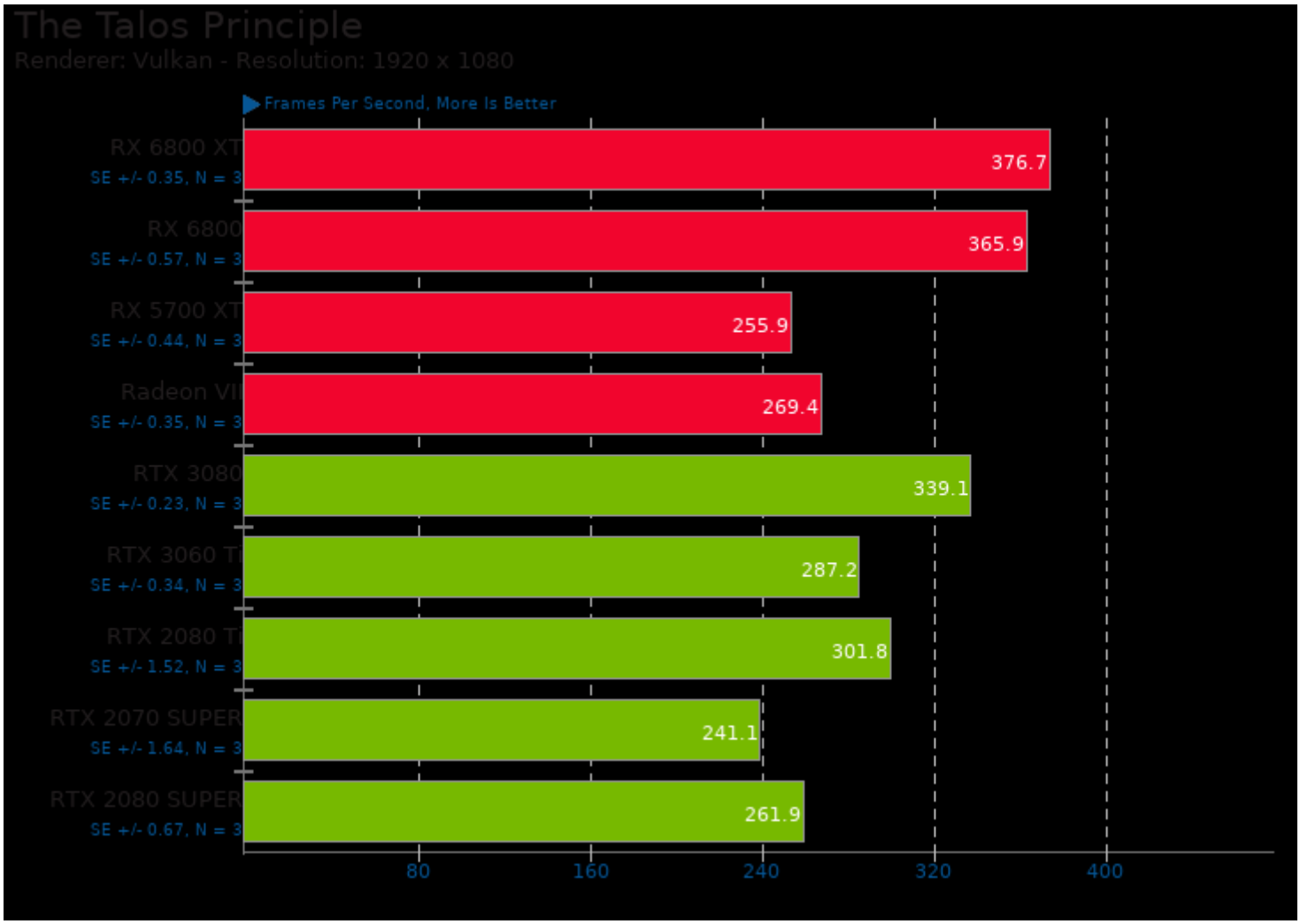
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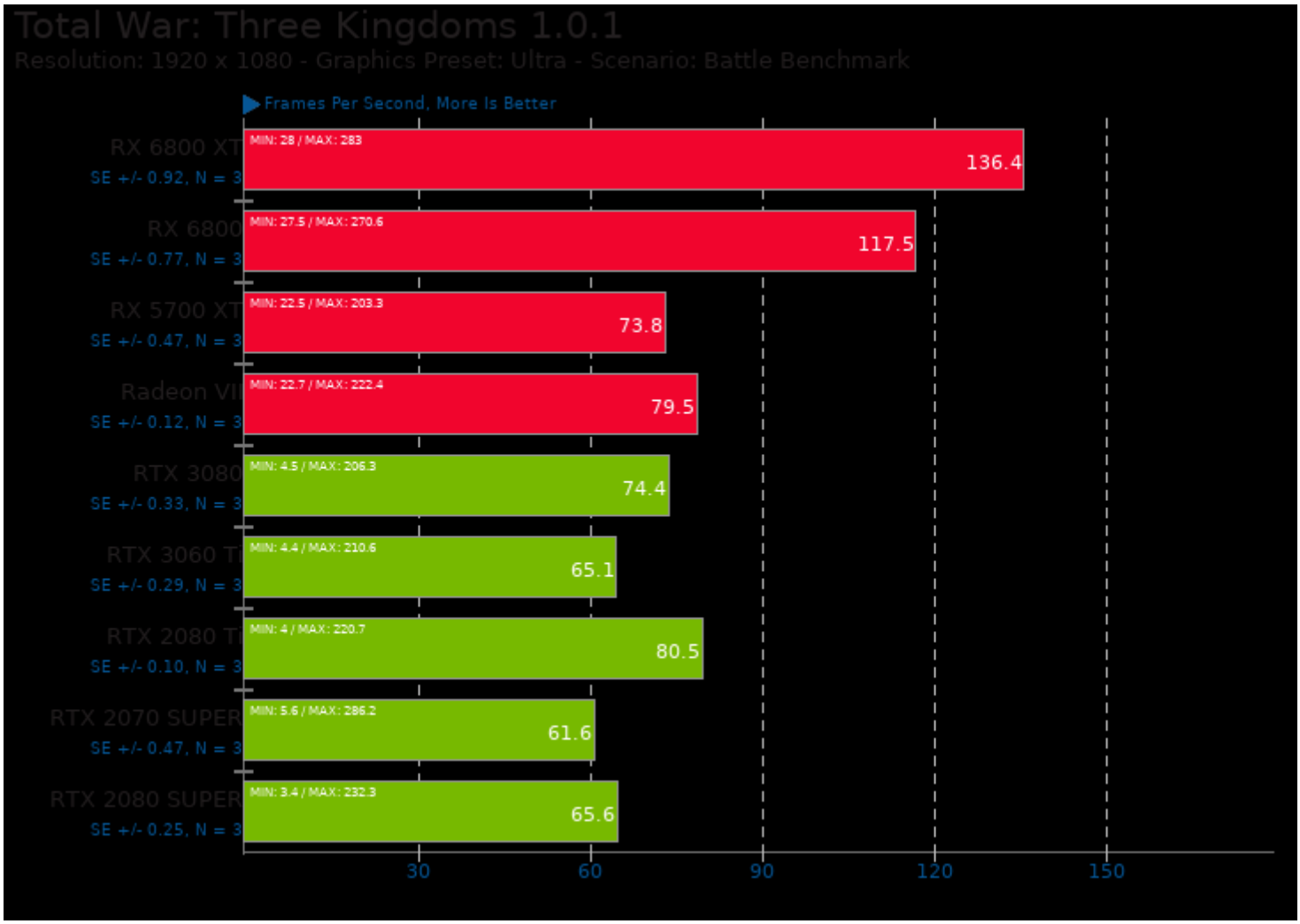


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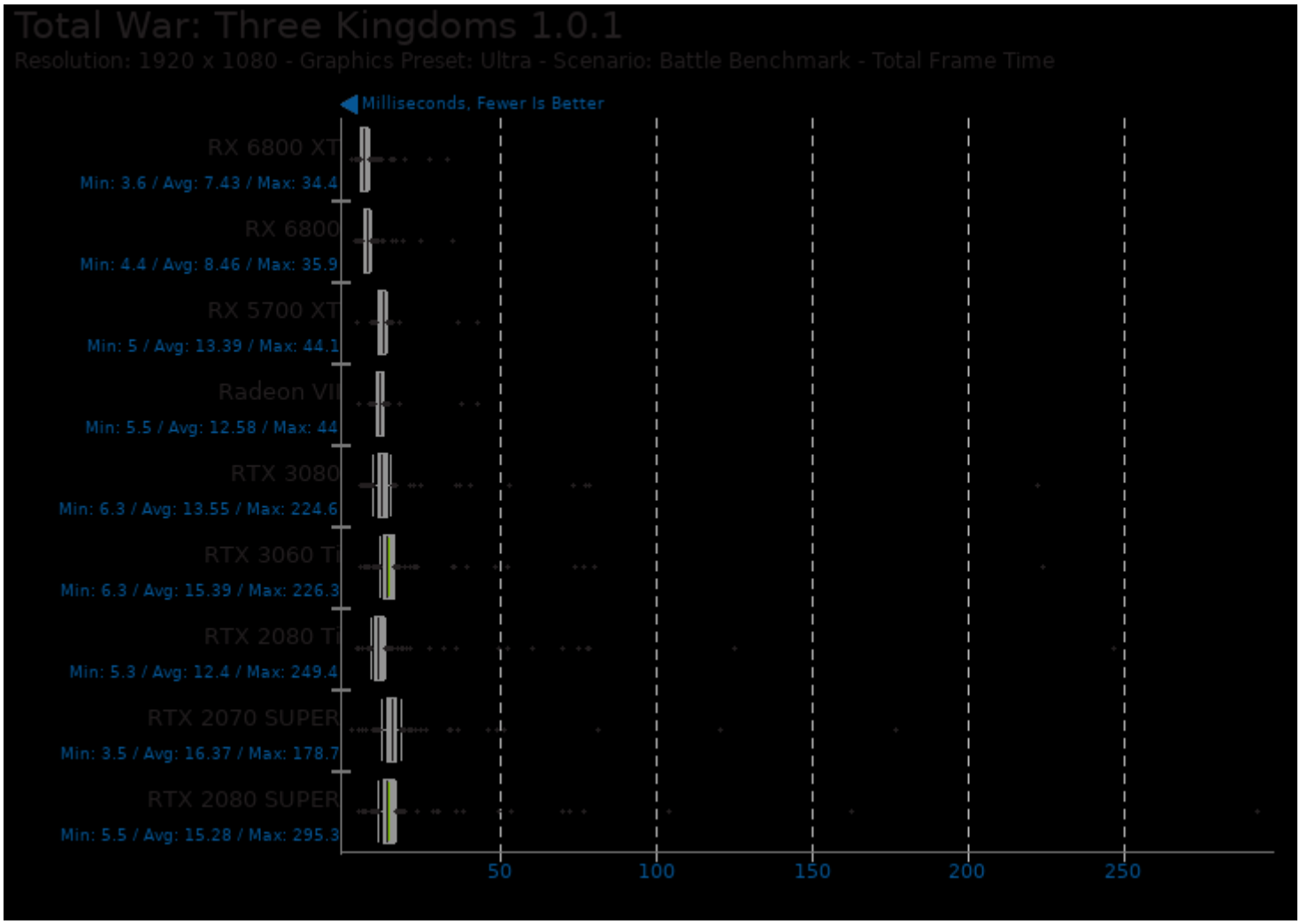


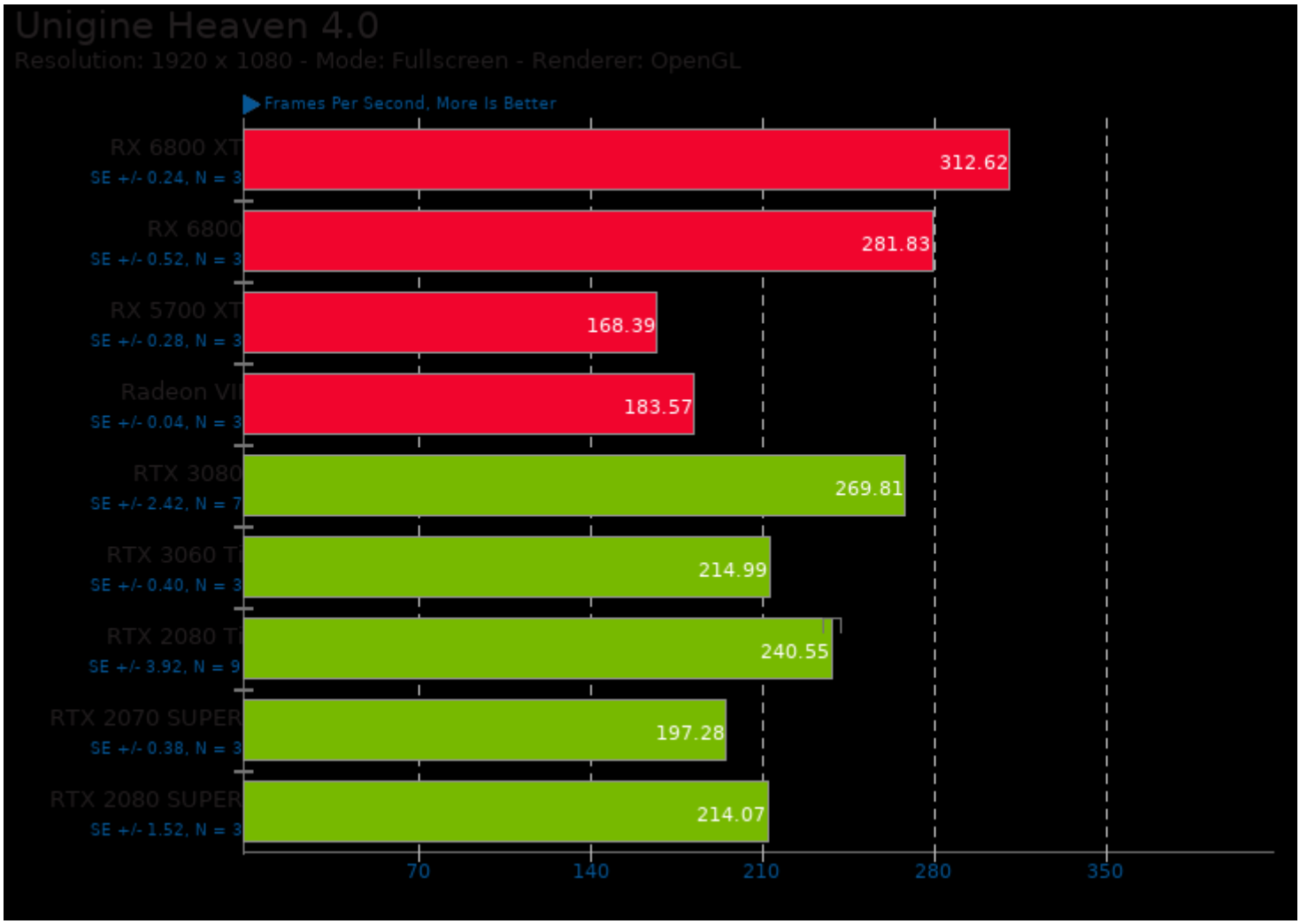
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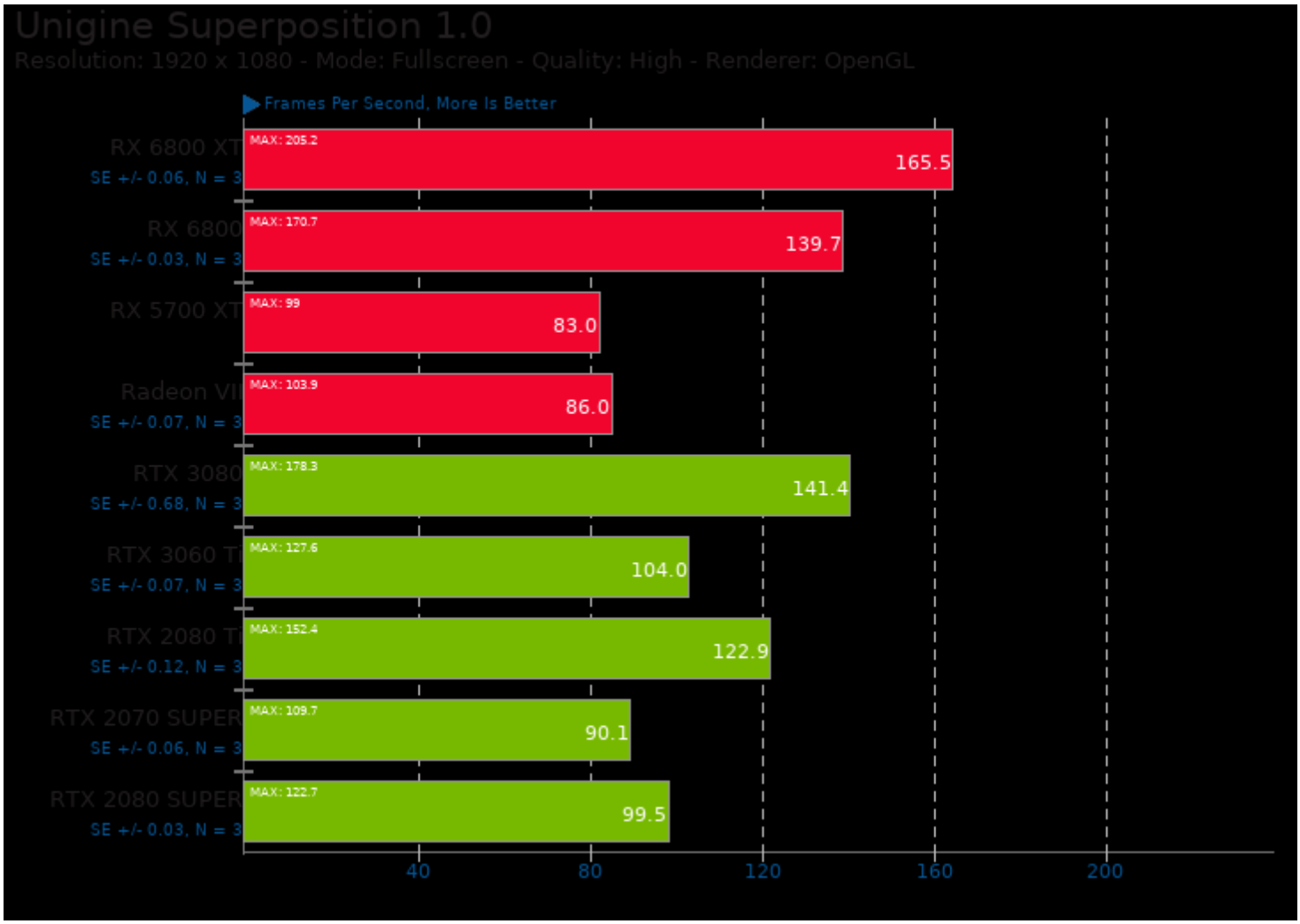

Total War: Three Kingdoms 1.0.1
Resolution: 1920 x 1080 - Graphics Preset: Ultra - Scenario: Battle Benchmark
Frames Per Second, More Is Better
RX 6800 XT
SE +/- 0.92, N = 3
MIN: 28 / MAX: 283
136.4
RX 6800
SE +/- 0.77, N = 3
MIN: 27.5 / MAX: 270.6
117.5
RX 5700 XT
SE +/- 0.47, N = 3
MIN: 22.5 / MAX: 203.3
73.8
Radeon VII
SE +/- 0.12, N = 3
MIN: 22.7 / MAX: 222.4
79.5
RTX 3080
SE +/- 0.33, N = 3
MIN: 4.5 / MAX: 206.3
74.4
RTX 3060 Ti
SE +/- 0.29, N = 3
MIN: 4.4 / MAX: 210.6
65.1
RTX 2080 Ti
SE +/- 0.10, N = 3
MIN: 4 / MAX: 220.7
80.5
RTX 2070 SUPER
SE +/- 0.47, N = 3
MIN: 5.6 / MAX: 286.2
61.6
RTX 2080 SUPER
SE +/- 0.25, N = 3
MIN: 3.4 / MAX: 232.3
65.6
30
60
90
120
150

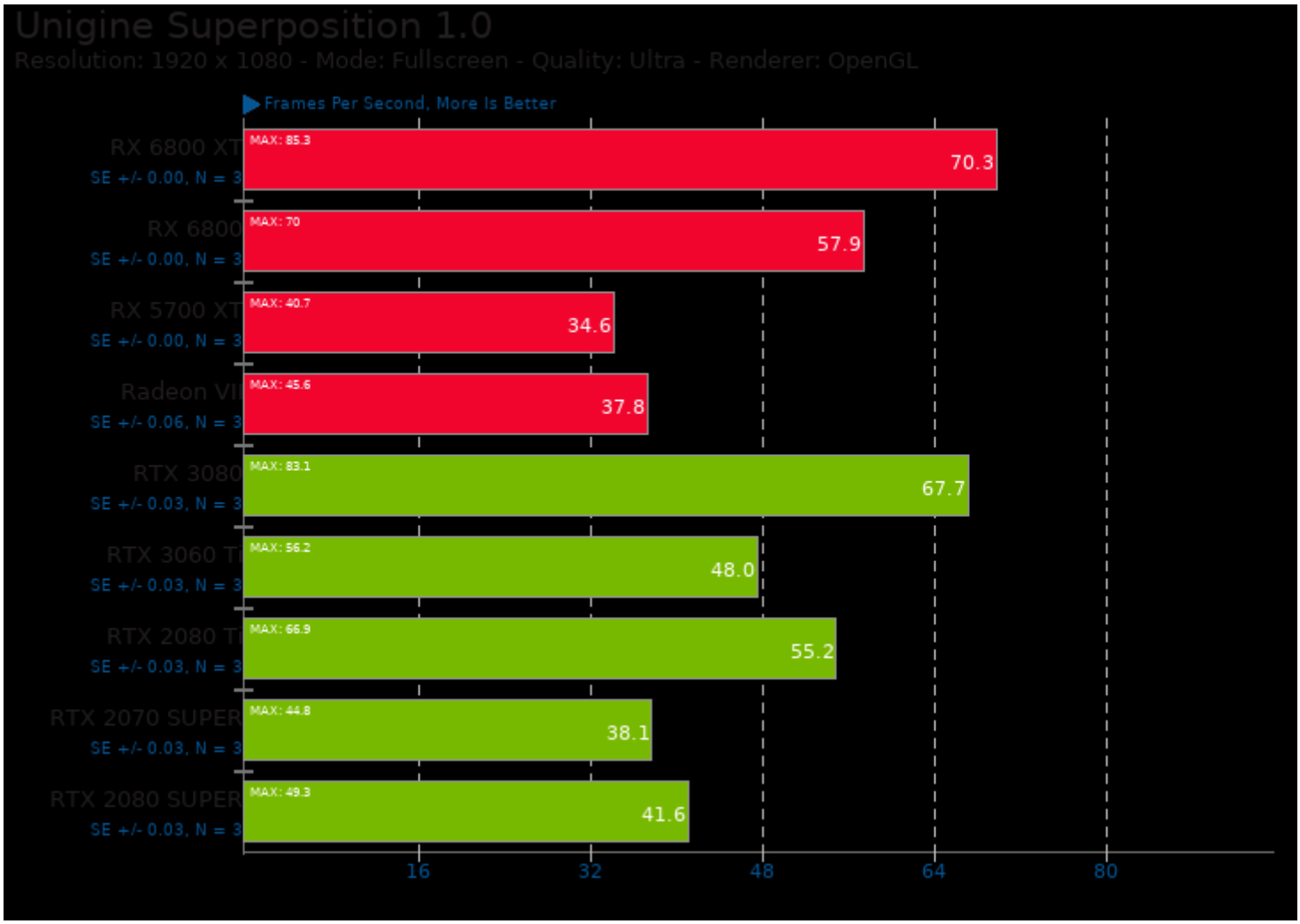
1080p Feb 2021



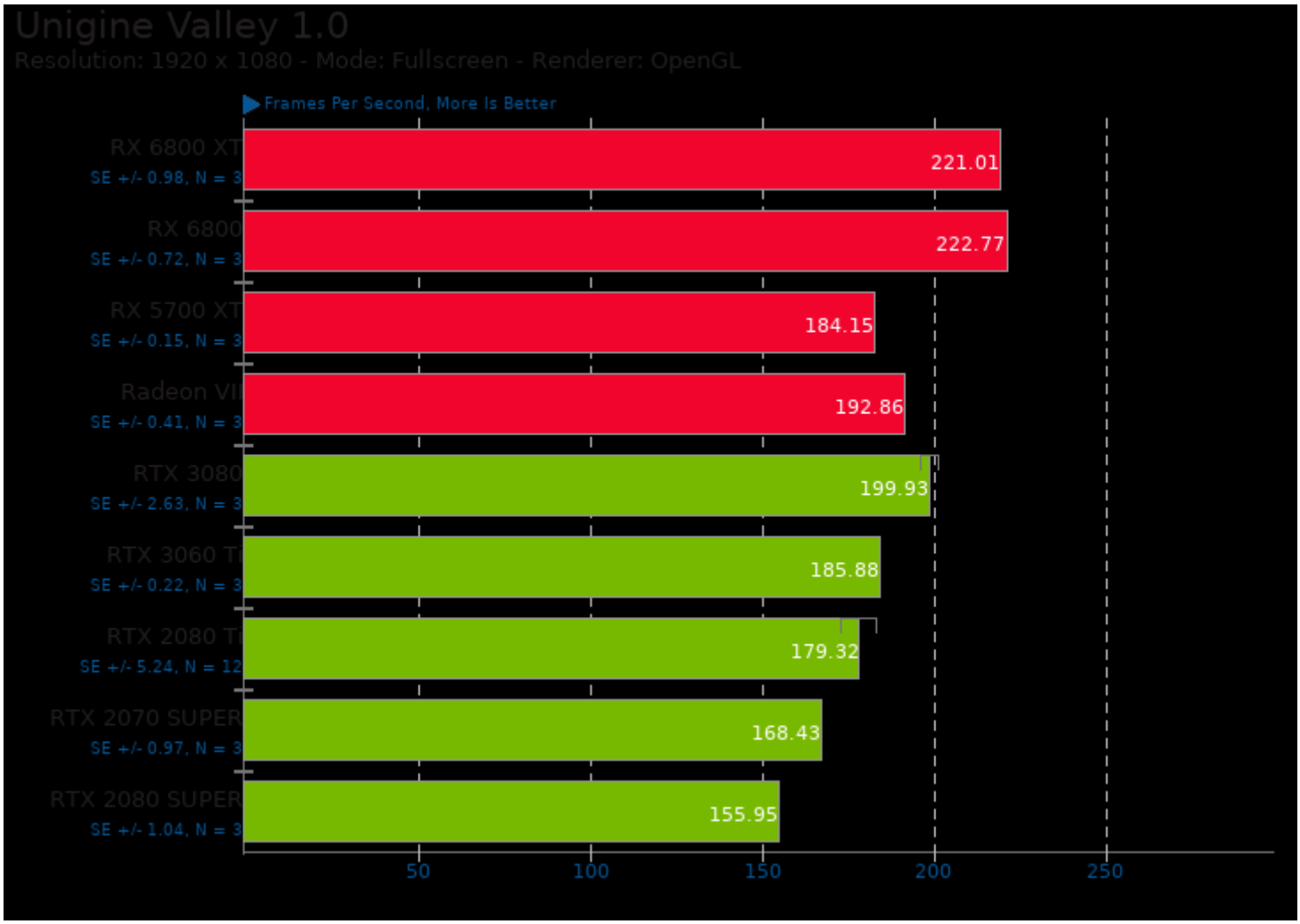

Unigine Heaven 4.0
Resolution: 1920 x 1080 - Mode: Fullscreen - Renderer: OpenGL
Frames Per Second, More Is Better
RX 6800 XT
SE +/- 0.24, N = 3
312.62
RX 6800
SE +/- 0.52, N = 3
281.83
RX 5700 XT
SE +/- 0.28, N = 3
168.39
Radeon VII
SE +/- 0.04, N = 3
183.57
RTX 3080
SE +/- 2.42, N = 7
269.81
RTX 3060 Ti
SE +/- 0.40, N = 3
214.99
RTX 2080 Ti
SE +/- 3.92, N = 9
240.55
RTX 2070 SUPER
SE +/- 0.38, N = 3
197.28
RTX 2080 SUPER
SE +/- 1.52, N = 3
214.07
70
140
210
280
350

1080p Feb 2021

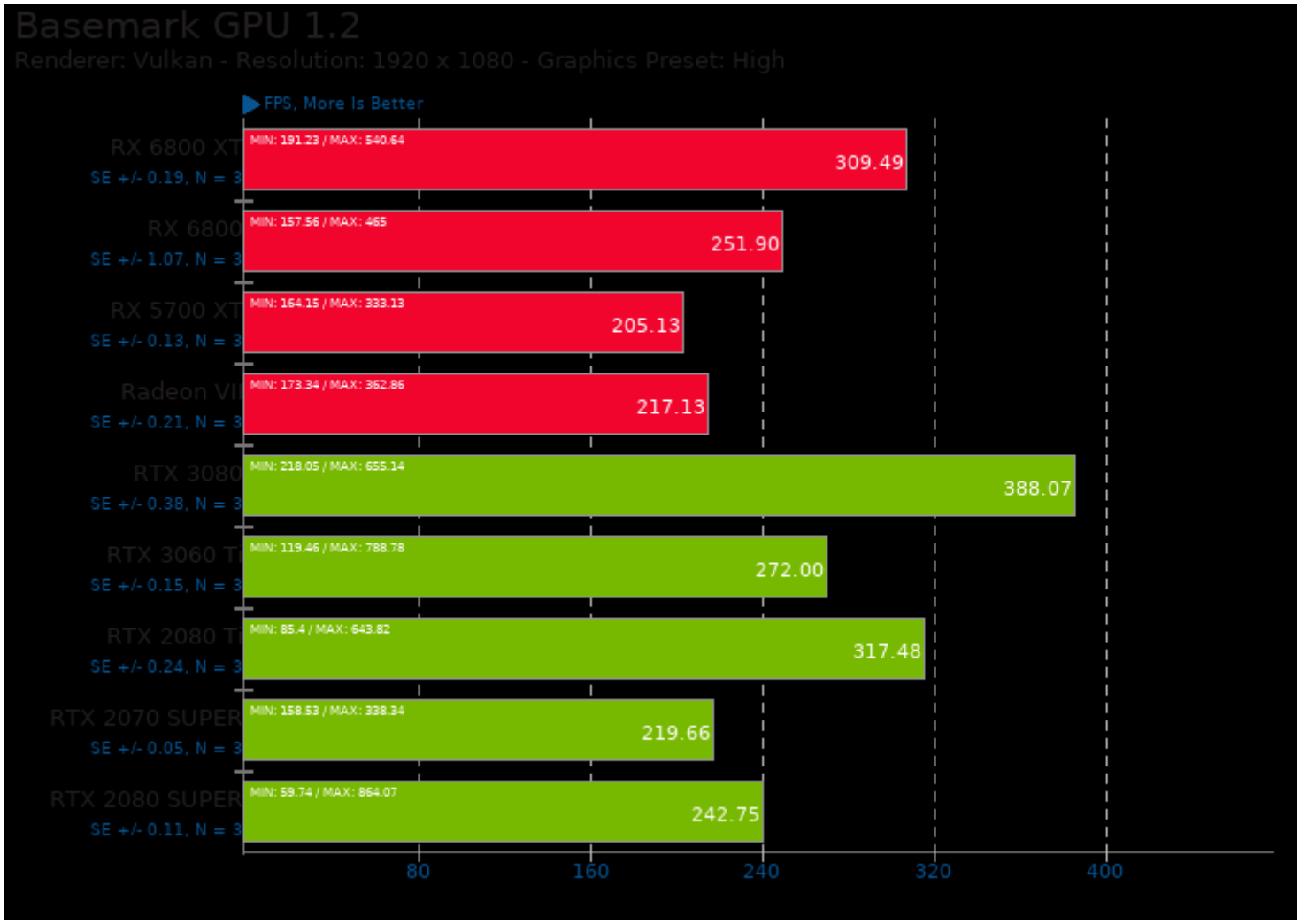



Unigine Superposition 1.0
Resolution: 1920 x 1080 - Mode: Fullscreen - Quality: Ultra - Renderer: OpenGL
Frames Per Second, More Is Better
RX 6800 XT
SE +/- 0.00, N = 3
MAX: 85.3
70.3
RX 6800
SE +/- 0.00, N = 3
MAX: 70
57.9
RX 5700 XT
SE +/- 0.00, N = 3
MAX: 40.7
34.6
Radeon VII
SE +/- 0.06, N = 3
MAX: 45.6
37.8
RTX 3080
SE +/- 0.03, N = 3
MAX: 83.1
67.7
RTX 3060 Ti
SE +/- 0.03, N = 3
MAX: 56.2
48.0
RTX 2080 Ti
SE +/- 0.03, N = 3
MAX: 66.9
55.2
RTX 2070 SUPER
SE +/- 0.03, N = 3
MAX: 44.8
38.1
RTX 2080 SUPER
SE +/- 0.03, N = 3
MAX: 49.3
41.6
16
32
48
64
80

1080p Feb 2021

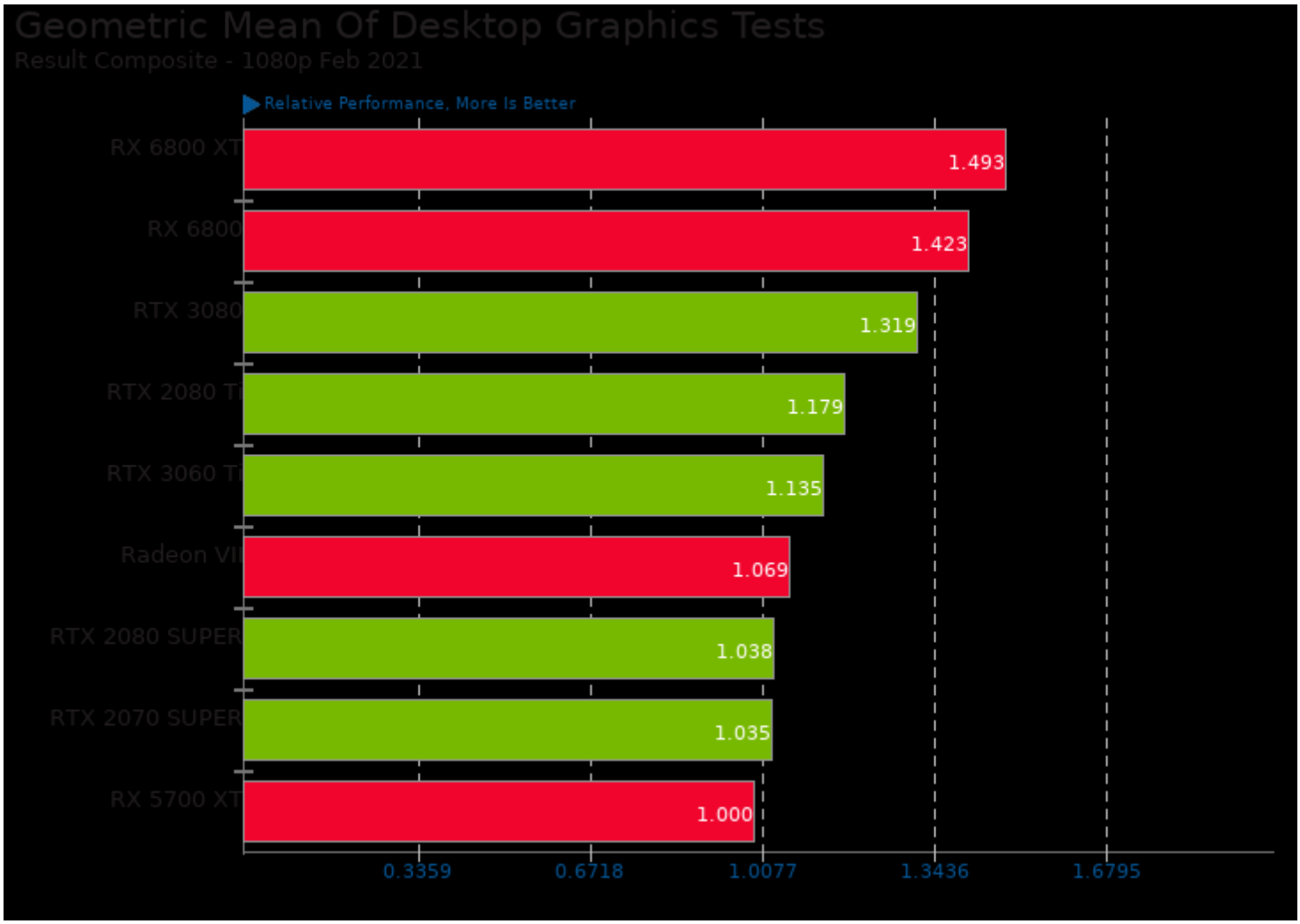


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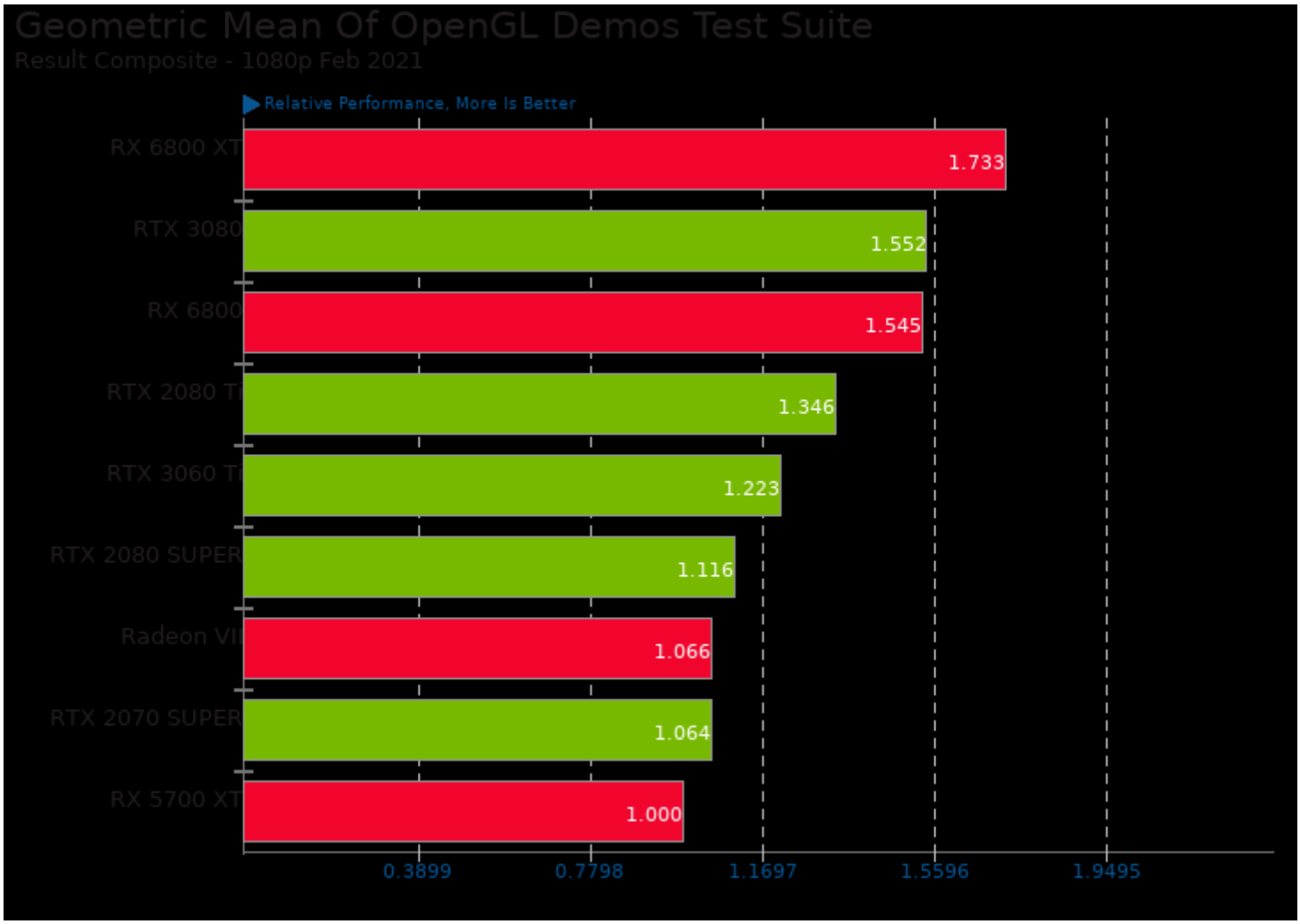


1080p Feb 2021

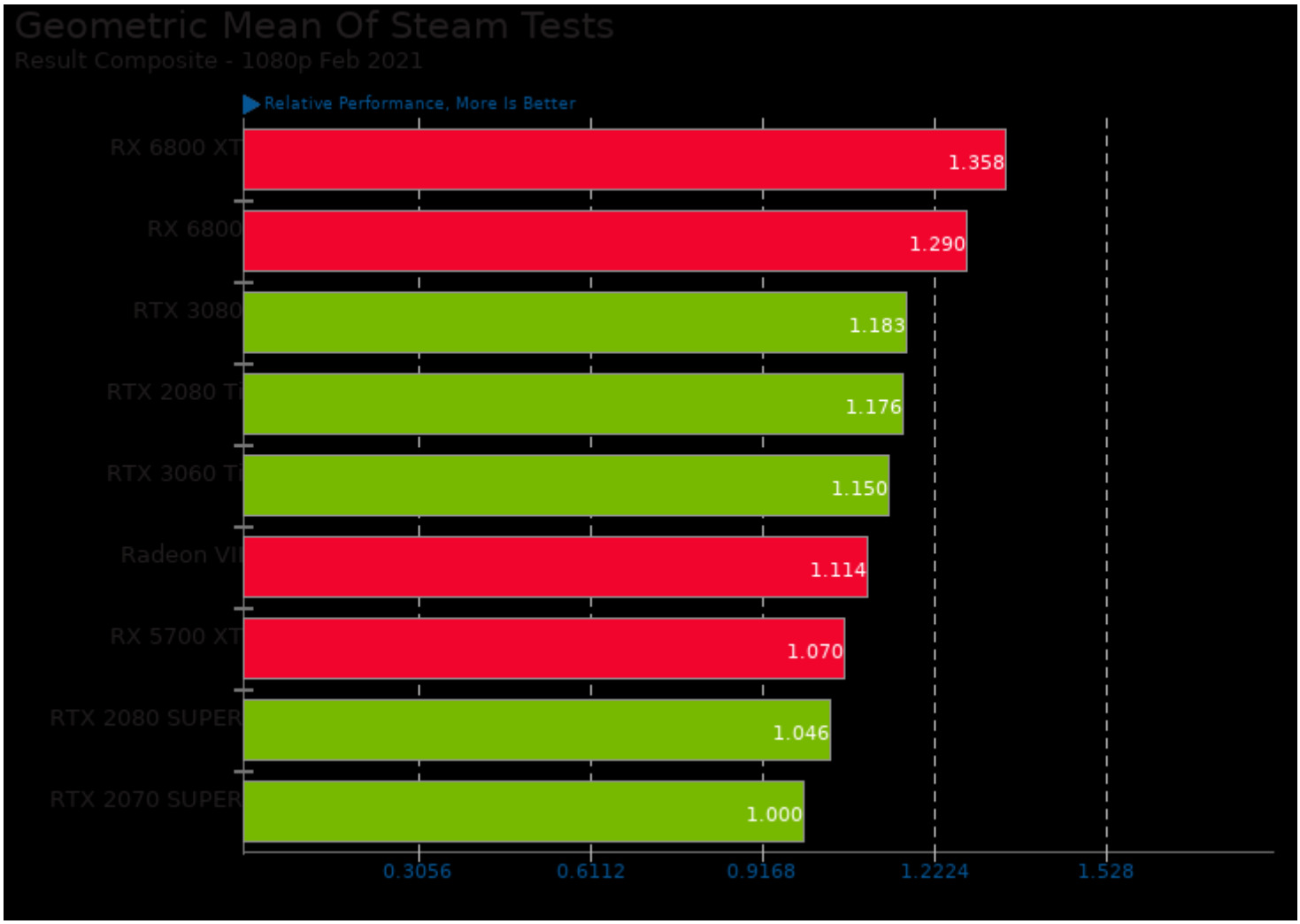
These geometric means are based upon test groupings / test suites for this result file.



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

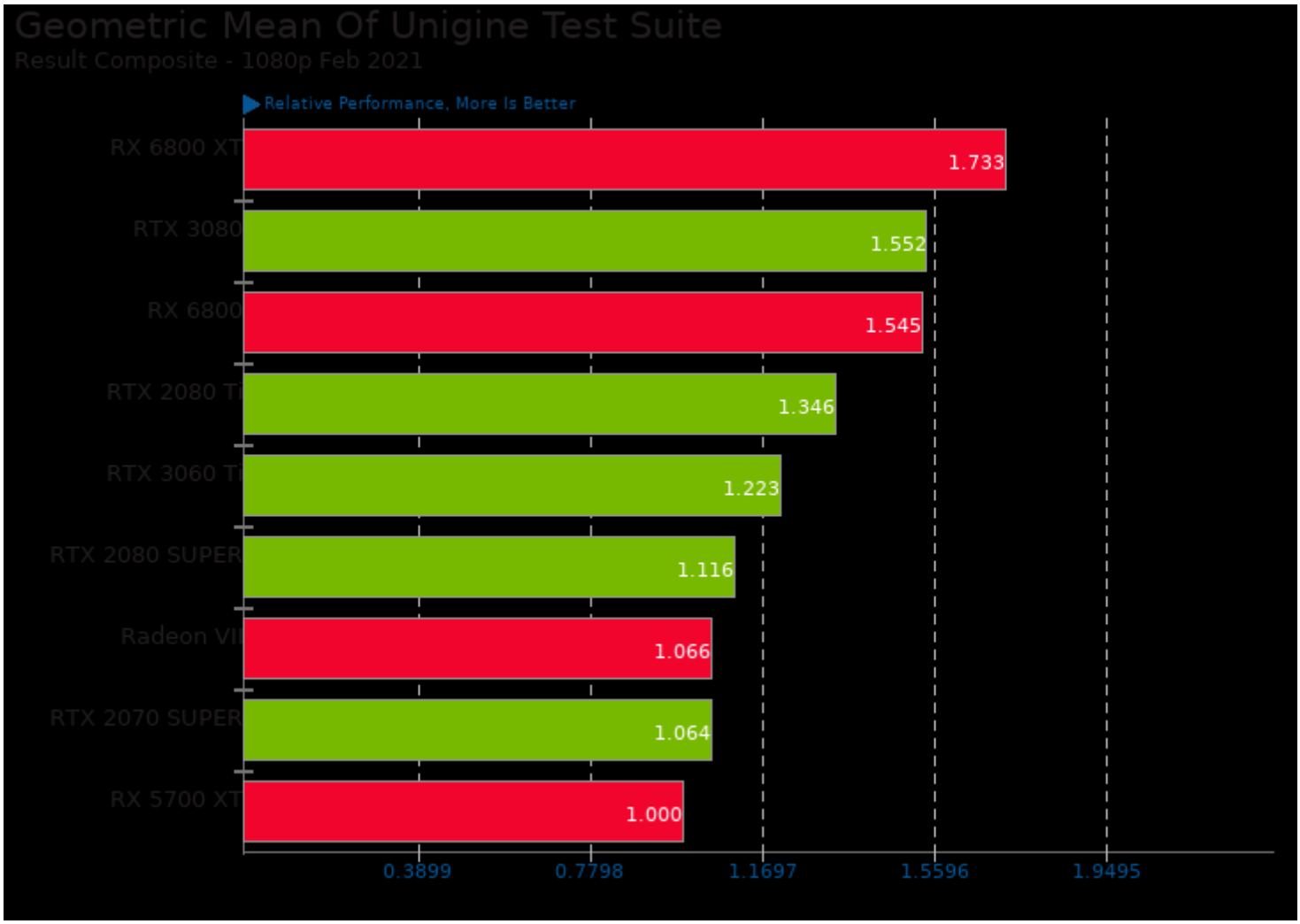


Geometric mean based upon tests: pts/unigine-valley, pts/unigine-heaven and pts/unigine-super



Geometric mean based upon tests: pts/batman-knight, pts/dow3, pts/f12017, pts/hitman, pts/hitman2, pts/shadowofthetombraider, pts/strange-brigade, pts/talos-principle and pts/twtk

1080p Feb 2021



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

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 06:02.