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LuxCoreRender 2.5 NVIDIA GPU Render Performance

Benchmarks by Michael Larabel of LuxCoreRender 2.5 with various NVIDIA GPUs on Linux.

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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 2560

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

GTX 1650

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 GTX 1650 4GB, Audio: NVIDIA Device 10fa, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 896
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

GTX 1650 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: ASUS NVIDIA GeForce GTX 1650 SUPER 4GB, Audio: NVIDIA TU116 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 1280
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

GTX 1660

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 GTX 1660 6GB, Audio: NVIDIA TU116 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 1408
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

GTX 1660 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: eVGA NVIDIA GeForce GTX 1660 SUPER 6GB, Audio: NVIDIA TU116 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 1408
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

GTX 1660 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: eVGA NVIDIA GeForce GTX 1660 Ti 6GB, Audio: NVIDIA TU116 HD Audio, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 1536
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 1920
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 2176
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 2304
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 2560
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 2944
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 3072
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 4352
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 4608
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 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 3584
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 Device 228b, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 4864
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 Device 228b, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 5888
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 Device 1aef, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 8704
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 Device 1aef, Monitor: ASUS VP28U, Network: Realtek RTL8125 2.5GbE + Intel I211

OS: Ubuntu 20.04, Kernel: 5.8.0-49-generic (x86_64), Desktop: GNOME Shell 3.36.7, Display Server: X Server 1.20.9, Display Driver: NVIDIA 465.24.02, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 CUDA 11.3.70, Vulkan: 1.1.168, Compiler: GCC 9.3.0 + CUDA 11.2, File-System: ext4, Screen Resolution: 3840x2160

Kernel Notes: Transparent Huge Pages: madvise
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0xa201009
OpenCL Notes: GPU Compute Cores: 10496
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

	GTX 1080	GTX 1650	GTX 1650 SUPER	GTX 1660	GTX 1660 SUPER	GTX 1660 Ti	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 3080	RTX 3090

LuxCoreRender 2.5 NVIDIA GPU Render Performance

Phoronix Test Suite

LuxCoreRender - Orange Juice - GPU (M samples/sec)	2.51	**0.15**	0.19	0.28	0.29	0.3	4.06	4.52	4.49	5.52	5.61	5.79	7.14	7.22	6.03	7.55	8.45	10.85	**12.52**
Normalized	20.05%	1.2%	1.52%	2.24%	2.32%	2.4%	32.43%	36.1%	35.86%	44.09%	44.81%	46.25%	57.03%	57.67%	48.16%	60.3%	67.49%	86.66%	100%
Standard Deviation	0.2%	0%	0%	0%	2%	0%	0.1%	0.3%	0.9%	0%	0.5%	0.1%	0.2%	0.1%	0.3%	0.3%	1.5%	1%	0.2%
Meta Performance Per Watts - P.P.W (Performance/Watts	2.3017	**0.2088**	0.2296	0.3609	0.4040	0.3794	4.0503	4.8228	4.7939	5.6463	5.6218	5.7548	7.4341	7.7485	6.0934	8.0886	9.1619	12.2746	**14.6764**
Normalized	15.68%	1.42%	1.56%	2.46%	2.75%	2.59%	27.6%	32.86%	32.66%	38.47%	38.31%	39.21%	50.65%	52.8%	41.52%	55.11%	62.43%	83.63%	100%
LuxCoreRender - LuxCore Benchmark - GPU (M samples/s	1.75	**0.02**	**0.02**	0.04	0.05	0.04	3.02	3.60	3.61	4.21	4.22	4.37	5.84	6.23	4.59	6.14	6.90	9.59	**11.47**
Normalized	15.26%	0.17%	0.17%	0.35%	0.44%	0.35%	26.33%	31.39%	31.47%	36.7%	36.79%	38.1%	50.92%	54.32%	40.02%	53.53%	60.16%	83.61%	100%
Standard Deviation	2%	0%	0%	0%	0%	0%	2.3%	1.6%	1.9%	1.4%	2.4%	2.2%	0.7%	1.6%	3.2%	0.8%	0.4%	1.1%	0.9%
LuxCoreRender - Danish Mood - GPU (M samples/sec)	1.53	**0.02**	0.03	0.04	0.05	0.05	2.54	2.84	2.89	3.61	3.74	3.86	5.07	5.18	3.64	4.91	5.67	8.08	**9.76**
Normalized	15.68%	0.2%	0.31%	0.41%	0.51%	0.51%	26.02%	29.1%	29.61%	36.99%	38.32%	39.55%	51.95%	53.07%	37.3%	50.31%	58.09%	82.79%	100%
Standard Deviation	0.7%	0%	0%	11.6%	0%	0%	1.1%	2.5%	1.1%	0.7%	0.8%	0.1%	1.3%	0.3%	2.4%	2.3%	2.3%	0.7%	0.9%

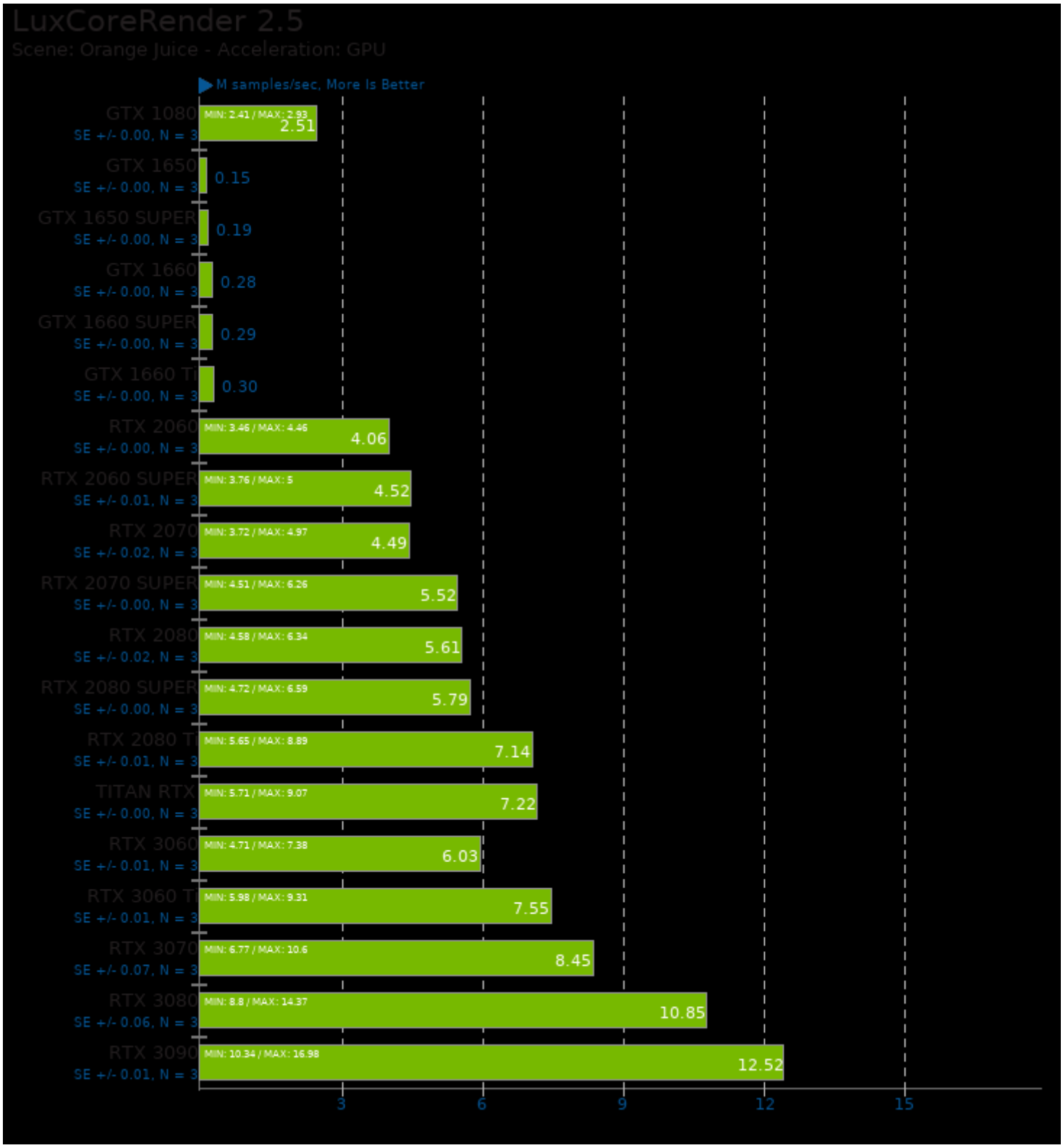
LuxCoreRender 2.5 NVIDIA GPU Render Performance

LuxCoreRender - DLSC - GPU (M samples/sec)	1.97	**1.37**	1.66	1.99	2.14	2.14	3.50	3.99	3.98	5.12	5.22	5.44	6.97	7.20	5.39	7.24	8.32	11.74	**14.16**
Normalized	13.91%	9.68%	11.72%	14.05%	15.11%	15.11%	24.72%	28.18%	28.11%	36.16%	36.86%	38.42%	49.22%	50.85%	38.06%	51.13%	58.76%	82.91%	100%
Standard Deviation	0.5%	0%	0.3%	1%	0.3%	0.5%	0.8%	0.5%	0.6%	0.5%	0.5%	0.2%	0.6%	0.6%	0.2%	0.1%	0.2%	0.3%	0.3%
LuxCoreRender - R.C.a.P - GPU (M samples/sec)	4.88	4.83	**3.37**	6.87	6.94	6.12	10.00	14.15	13.58	13.36	12.15	11.88	15.41	16.65	15.47	21.01	23.47	28.23	**34.31**
Normalized	14.22%	14.08%	9.82%	20.02%	20.23%	17.84%	29.15%	41.24%	39.58%	38.94%	35.41%	34.63%	44.91%	48.53%	45.09%	61.24%	68.41%	82.28%	100%
Standard Deviation	0.2%	0.1%	0%	0.2%	0.1%	0.4%	0.1%	0.1%	0.2%	0.1%	0.2%	1.4%	0.4%	1%	0.7%	0.2%	1%	0.7%	0.3%
LuxCoreRender - Danish Mood - GPU (M samples/sec/Watt)	0.019	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	0.028	0.027	0.029	0.03	0.029	0.032	0.03	0.028	0.041	0.041	**0.044**	0.038	0.038
Normalized	43.18%	2.27%	2.27%	2.27%	2.27%	2.27%	63.64%	61.36%	65.91%	68.18%	65.91%	72.73%	68.18%	63.64%	93.18%	93.18%	100%	86.36%	86.36%
LuxCoreRender - Orange Juice - GPU (M samples/sec/Watt)	0.027	**0.004**	**0.004**	0.007	0.005	0.006	0.041	0.04	0.041	0.042	0.04	0.044	0.038	0.036	**0.06**	0.055	0.057	0.045	0.044
Normalized	45%	6.67%	6.67%	11.67%	8.33%	10%	68.33%	66.67%	68.33%	70%	66.67%	73.33%	63.33%	60%	100%	91.67%	95%	75%	73.33%

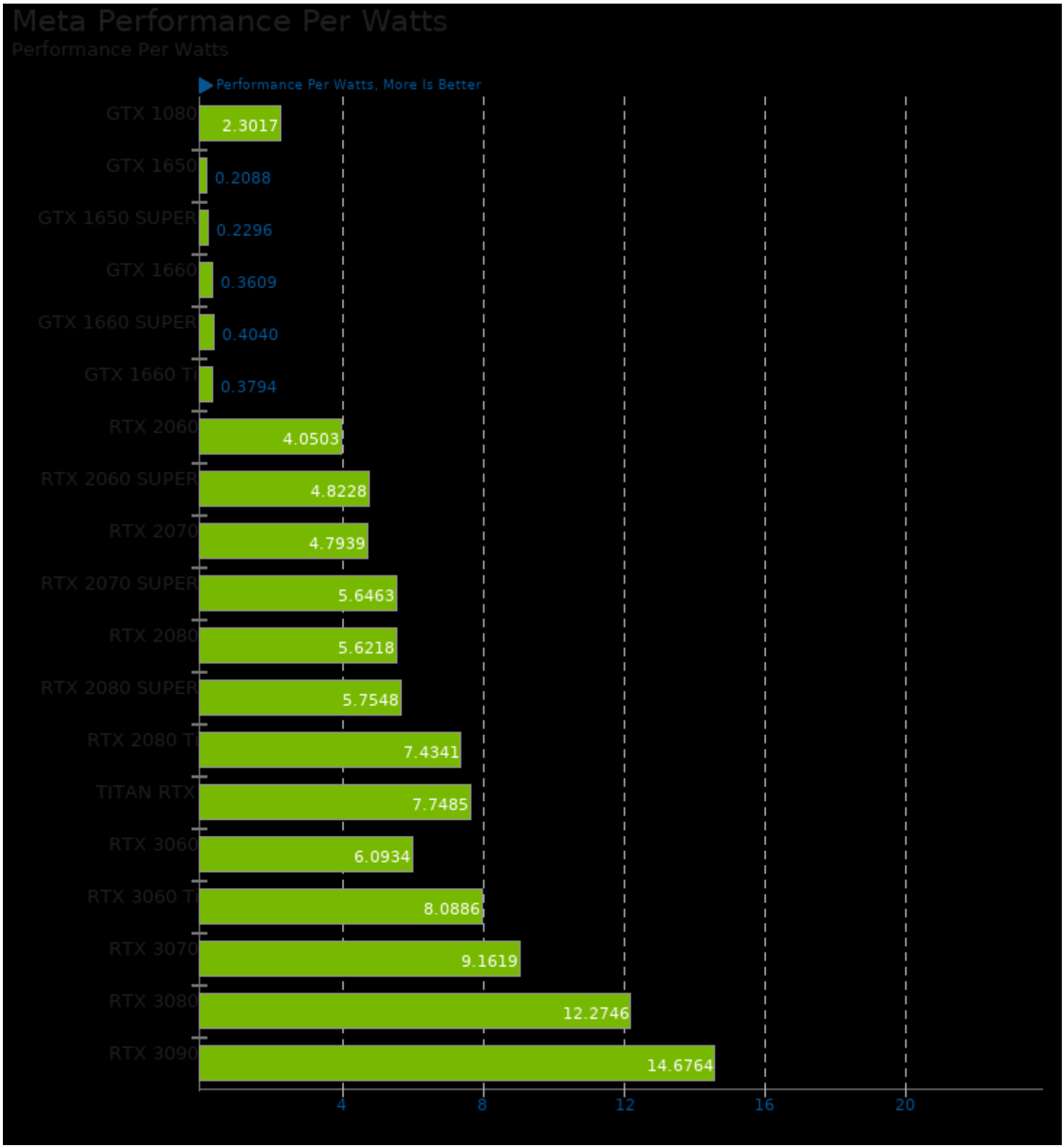
LuxCoreRender 2.5 NVIDIA GPU Render Performance

LuxCoRender - LuxCore Benchmark - GPU (M samples/s	0.02	0.001	0.001	0.001	0.001	0.001	0.031	0.031	0.032	0.033	0.031	0.035	0.032	0.032	0.047	0.047	0.049	0.041	0.041
Normalized	40.82%	2.04%	2.04%	2.04%	2.04%	2.04%	63.27%	63.27%	65.31%	67.35%	63.27%	71.43%	65.31%	65.31%	95.92%	95.92%	100%	83.67%	83.67%
LuxCoRender - R.C.a.P - GPU (M samples/sec/Watt)	0.059	0.102	0.066	0.121	0.087	0.089	0.108	0.133	0.129	0.122	0.107	0.11	0.105	0.106	0.176	0.19	0.214	0.152	0.168
Normalized	27.57%	47.66%	30.84%	56.54%	40.65%	41.59%	50.47%	62.15%	60.28%	57.01%	50%	51.4%	49.07%	49.53%	82.24%	88.79%	100%	71.03%	78.5%
LuxCoRender - DLSC - GPU (M samples/sec/Watt)	0.021	0.031	0.03	0.035	0.026	0.03	0.035	0.034	0.035	0.039	0.05	0.04	0.037	0.036	0.052	0.054	0.056	0.047	0.049
Normalized	37.5%	55.36%	53.57%	62.5%	46.43%	53.57%	62.5%	60.71%	62.5%	69.64%	89.29%	71.43%	66.07%	64.29%	92.86%	96.43%	100%	83.93%	87.5%

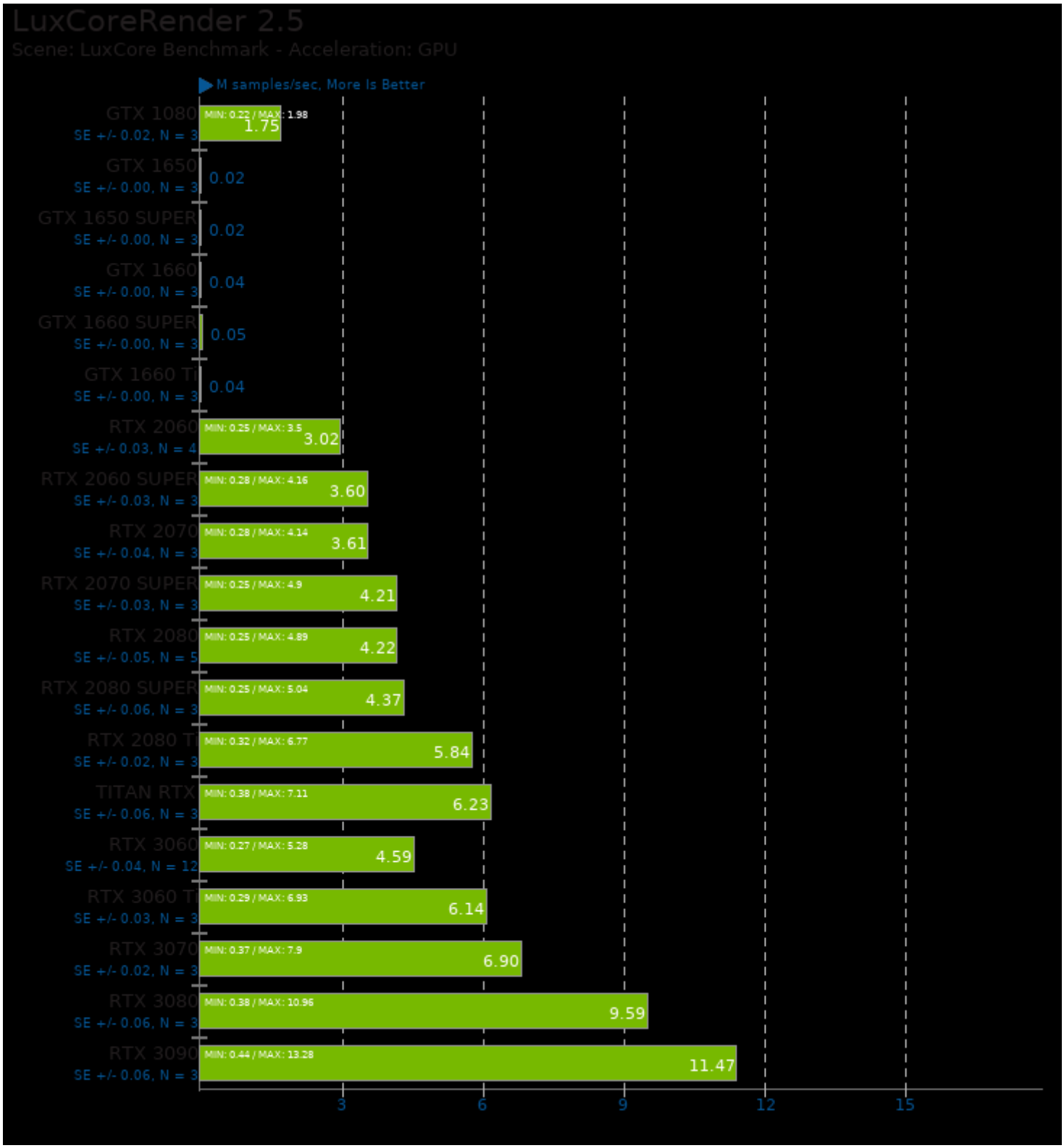
LuxCoreRender 2.5 NVIDIA GPU Render Performance



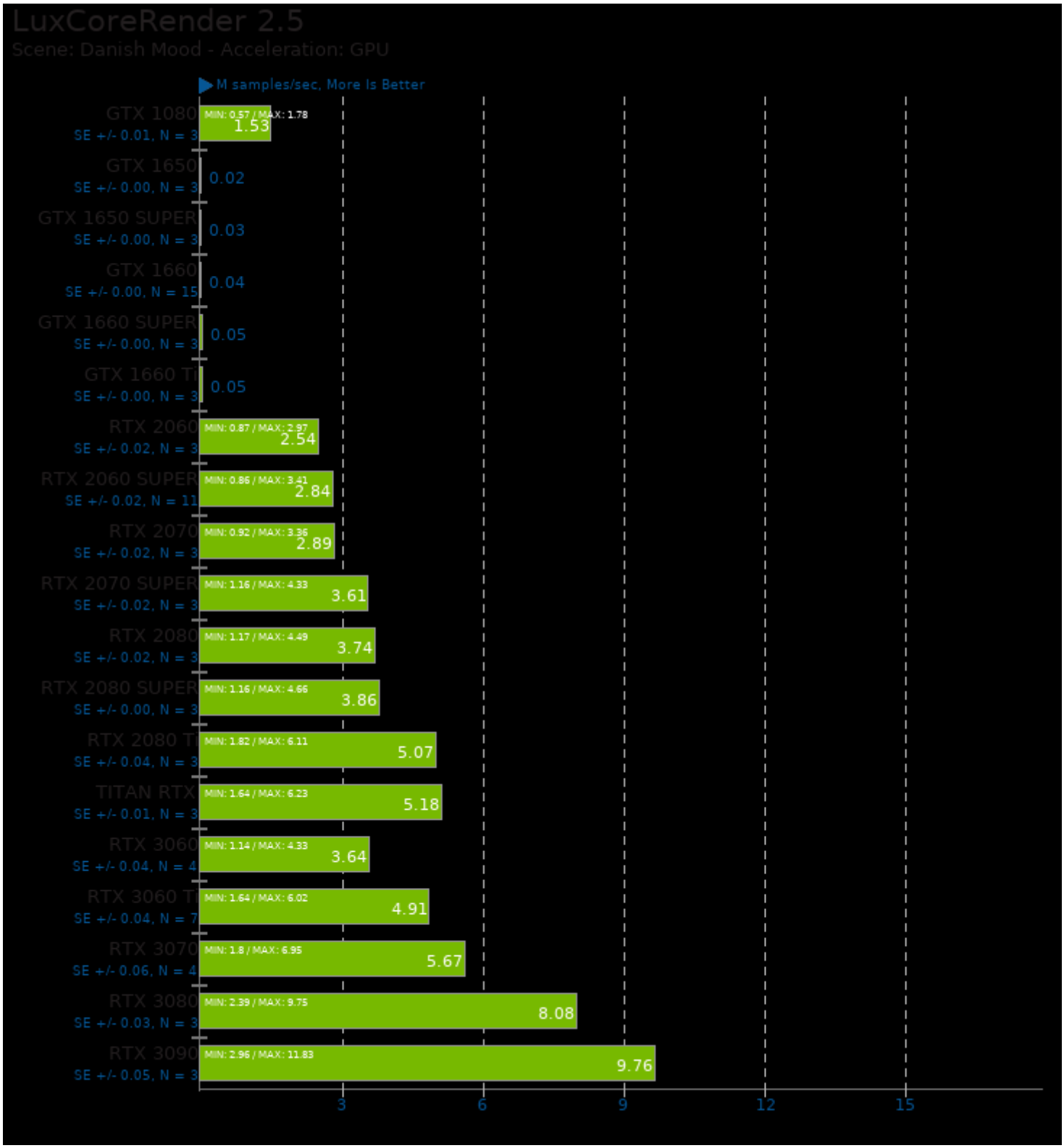
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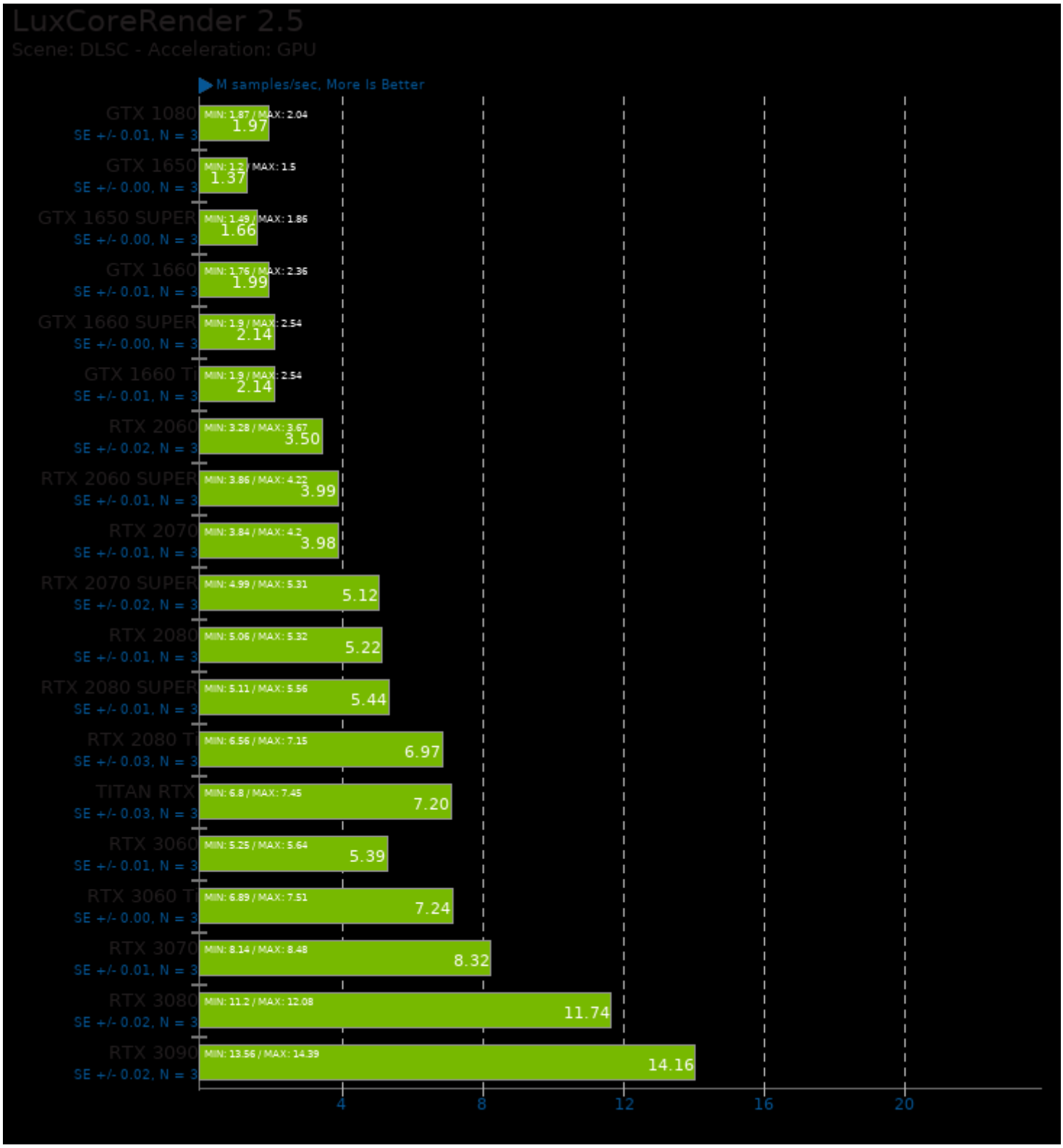
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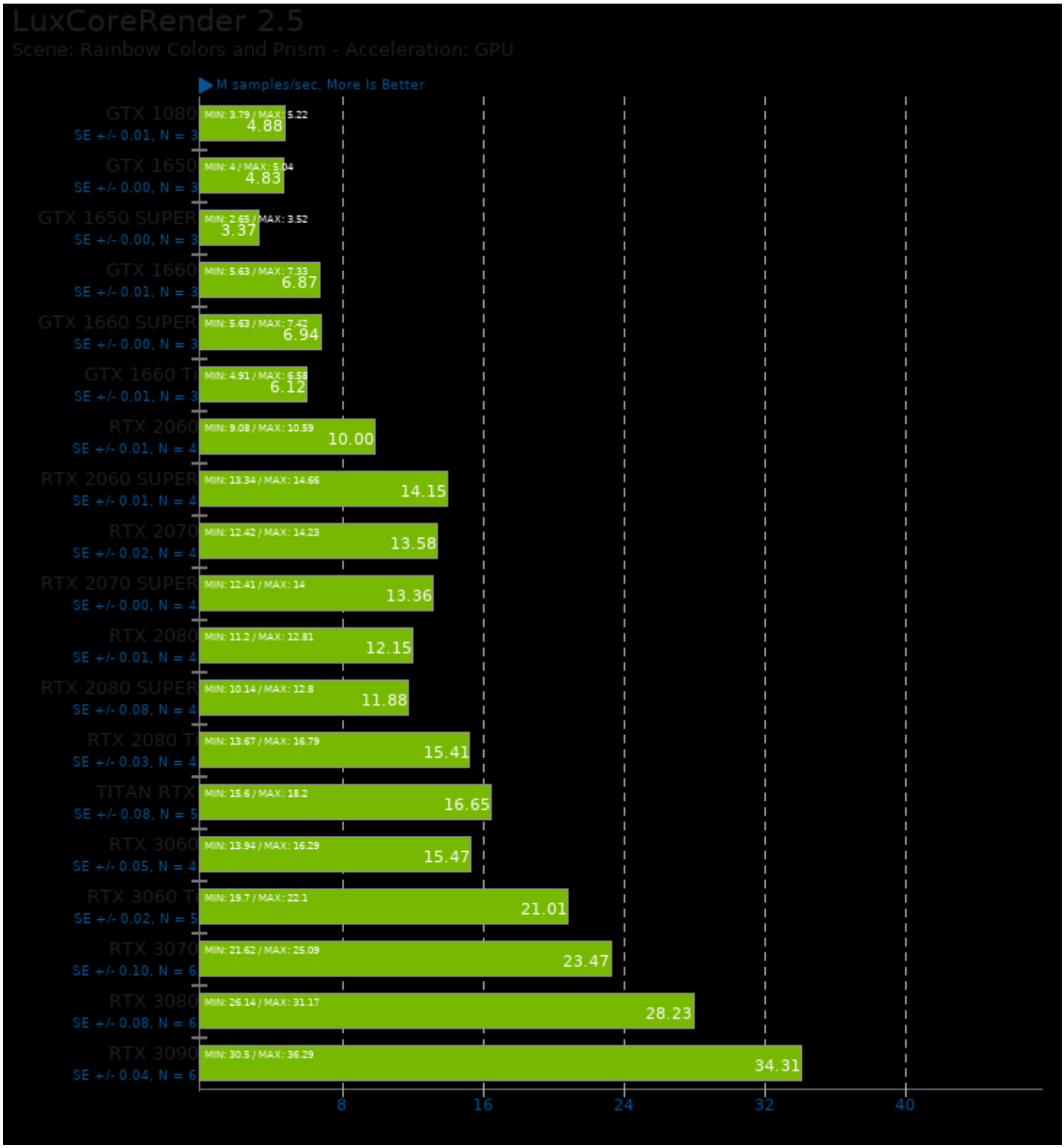
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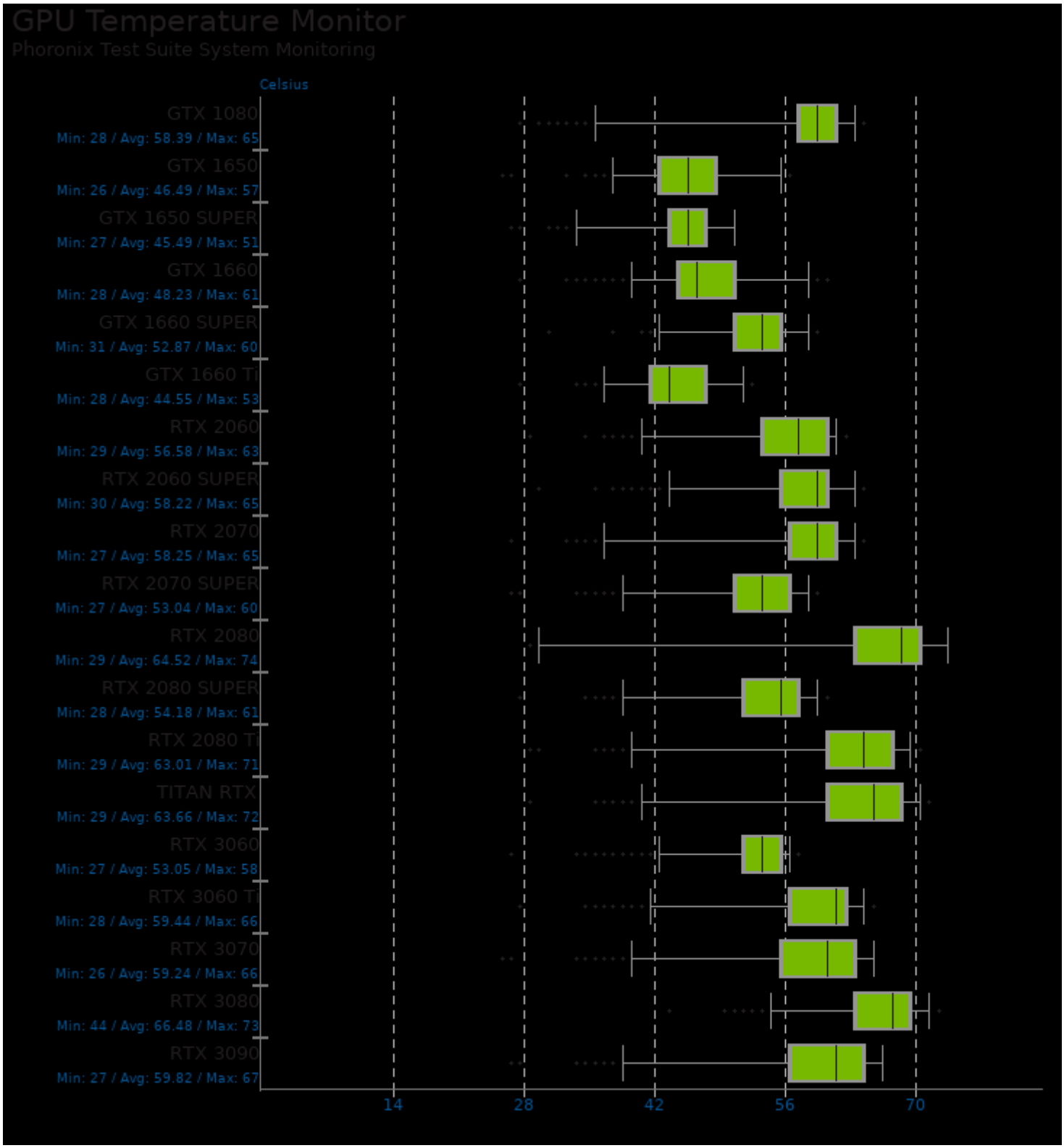
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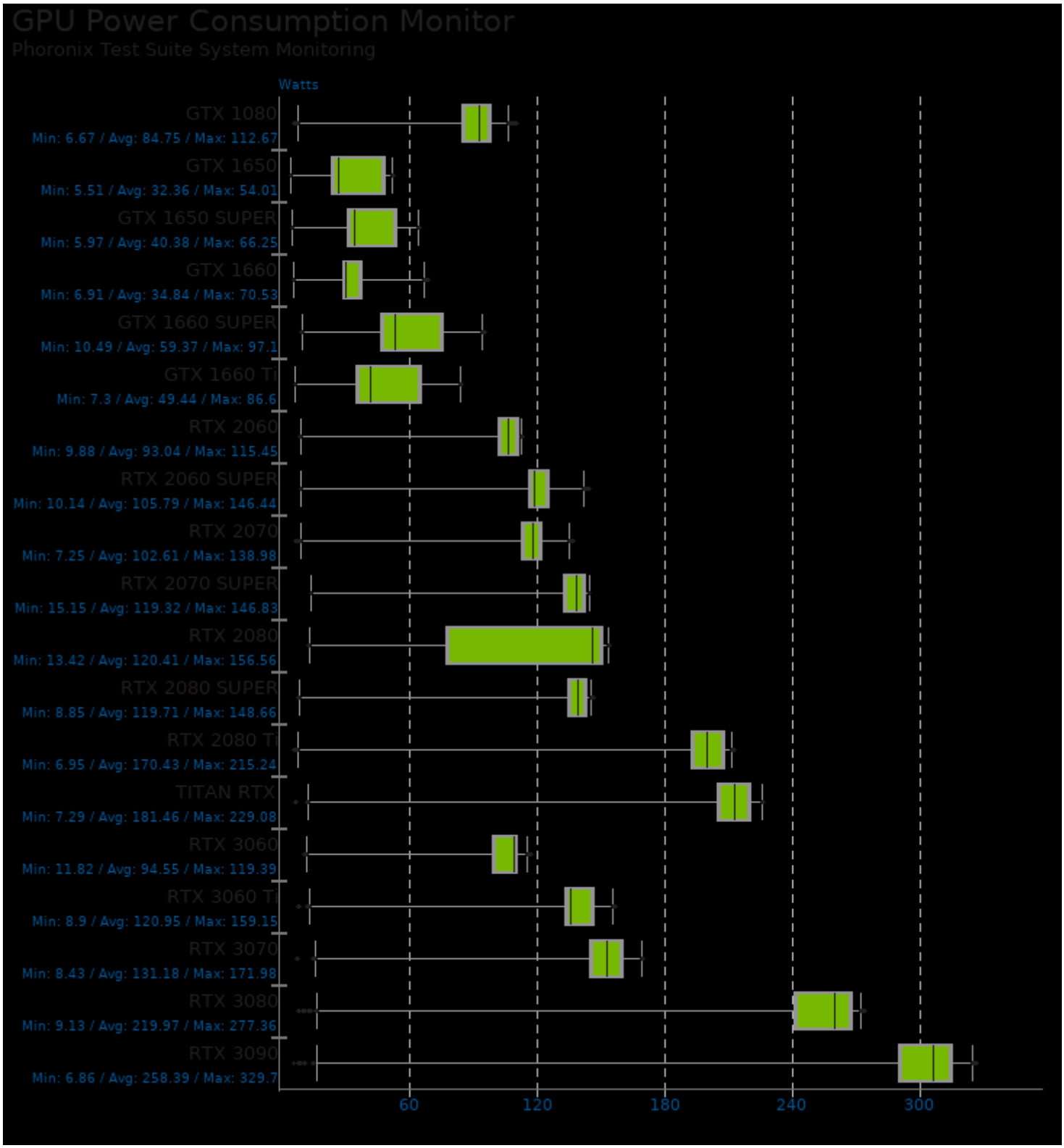
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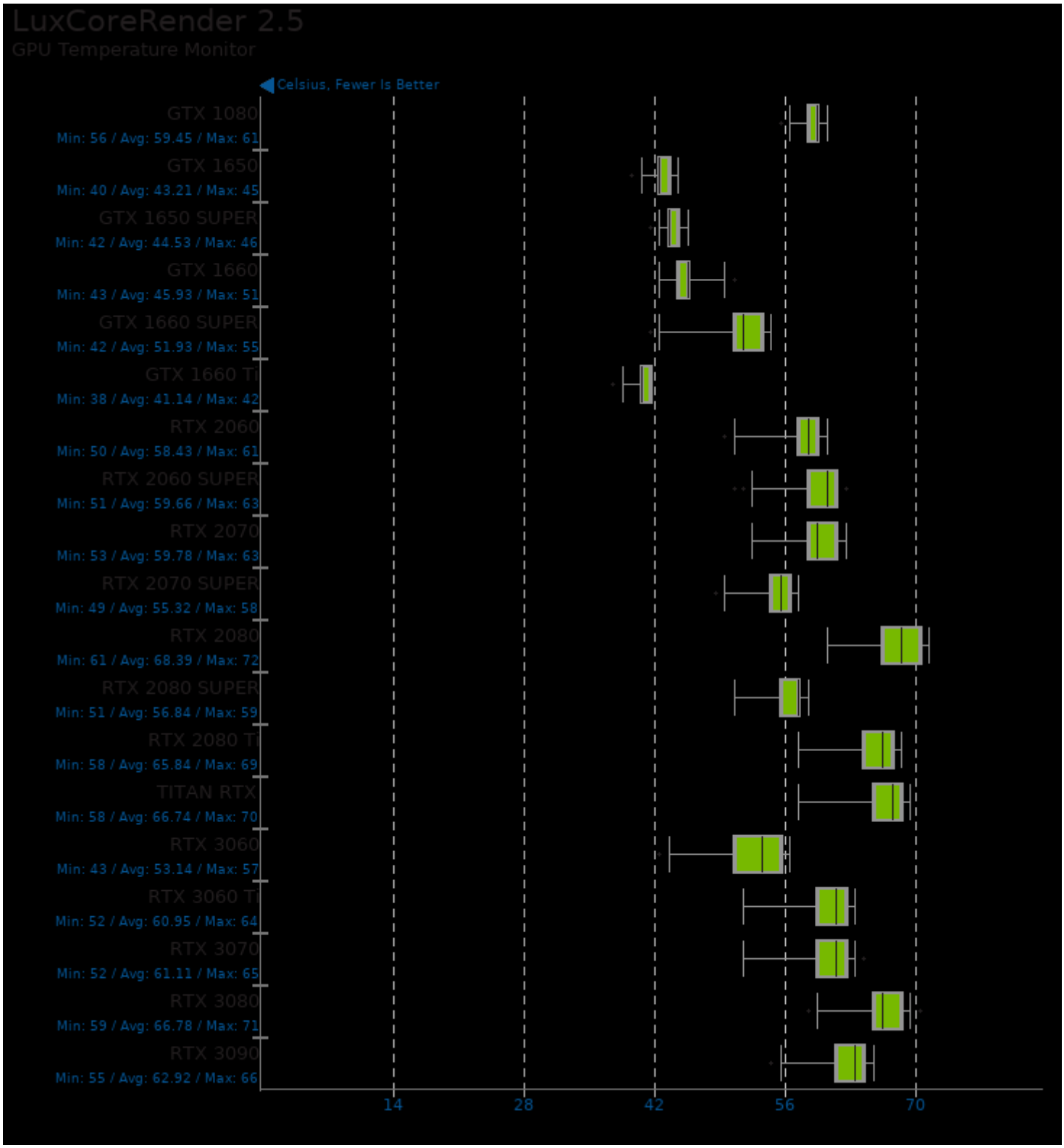
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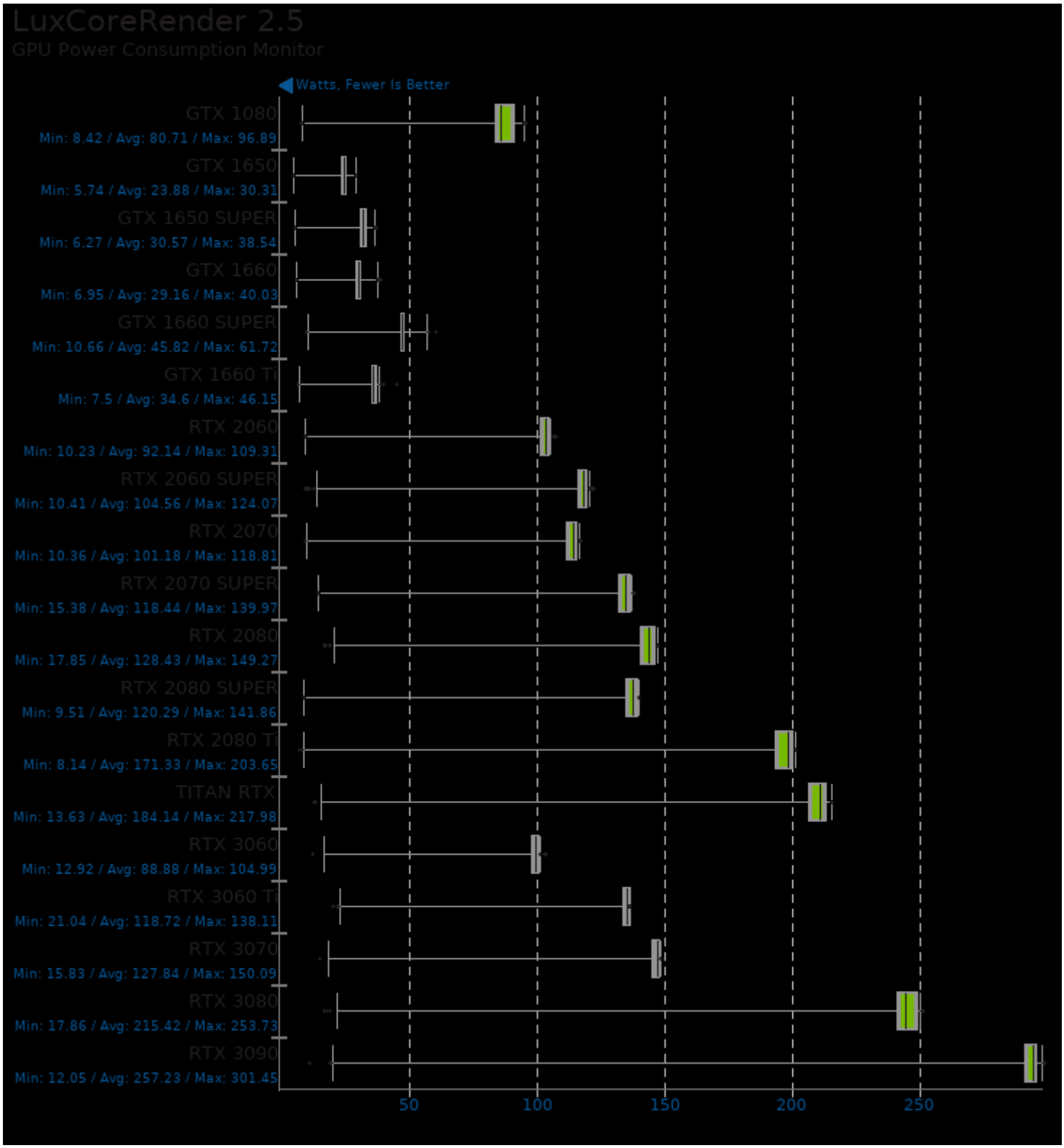
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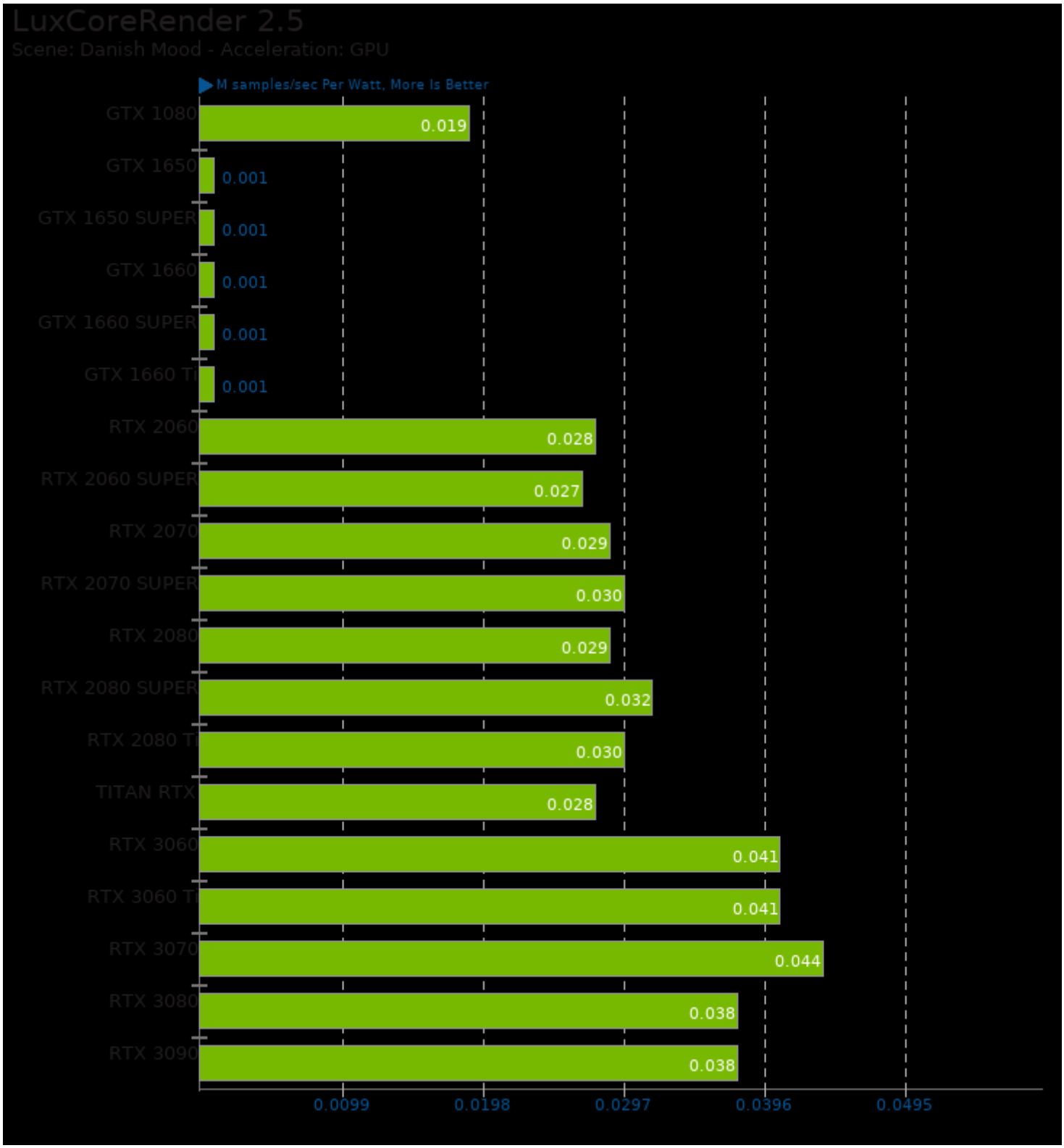
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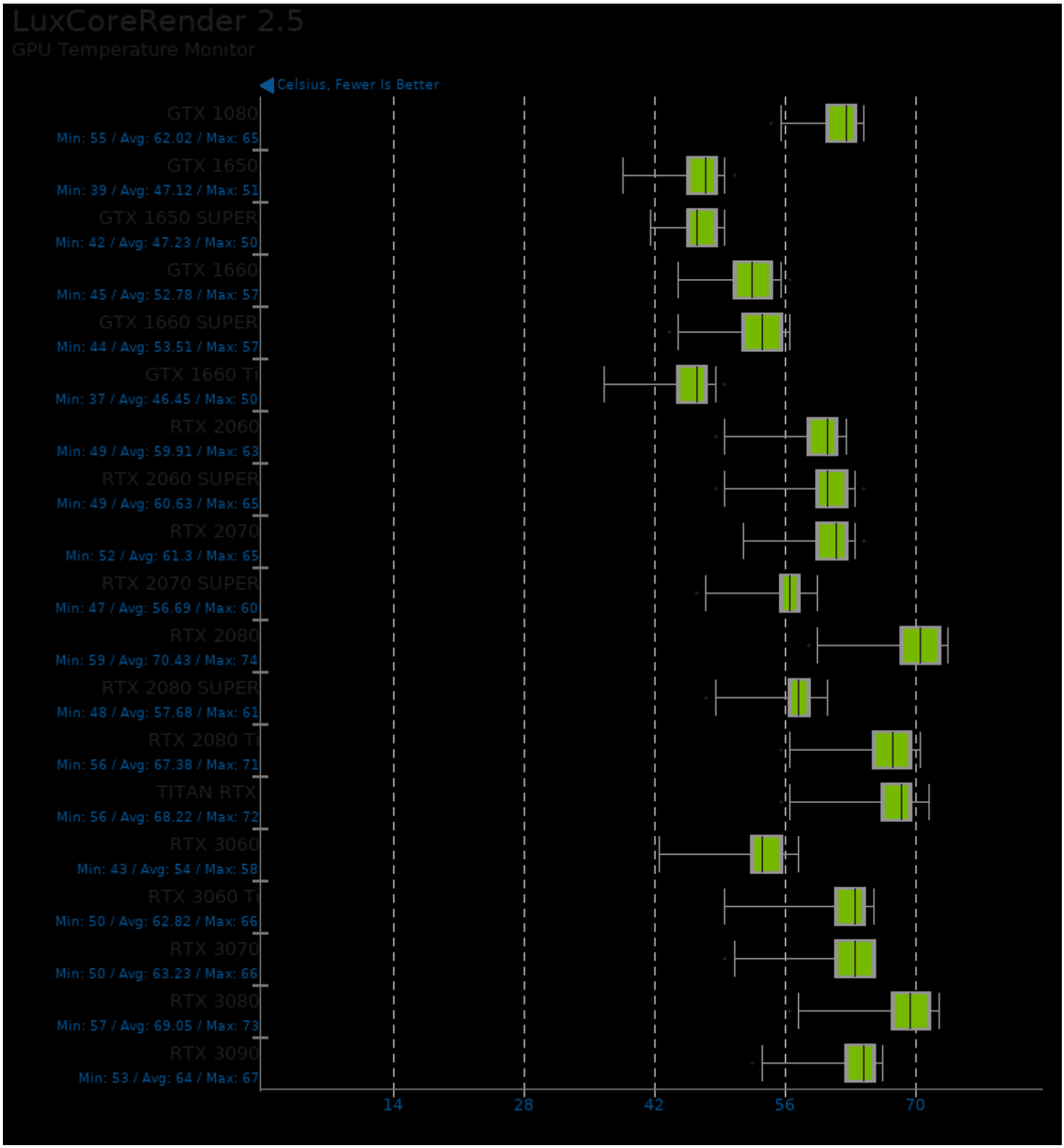
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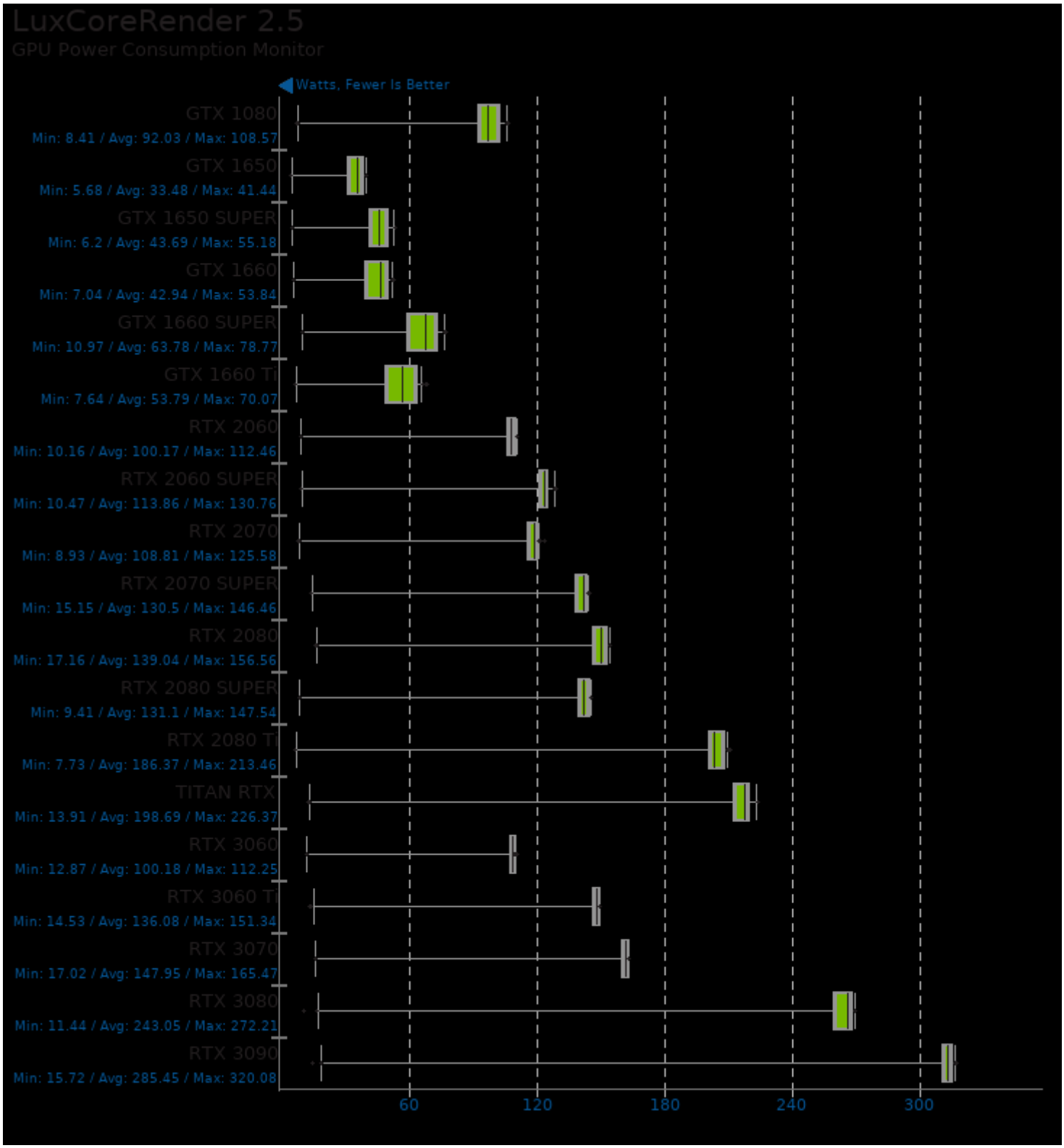
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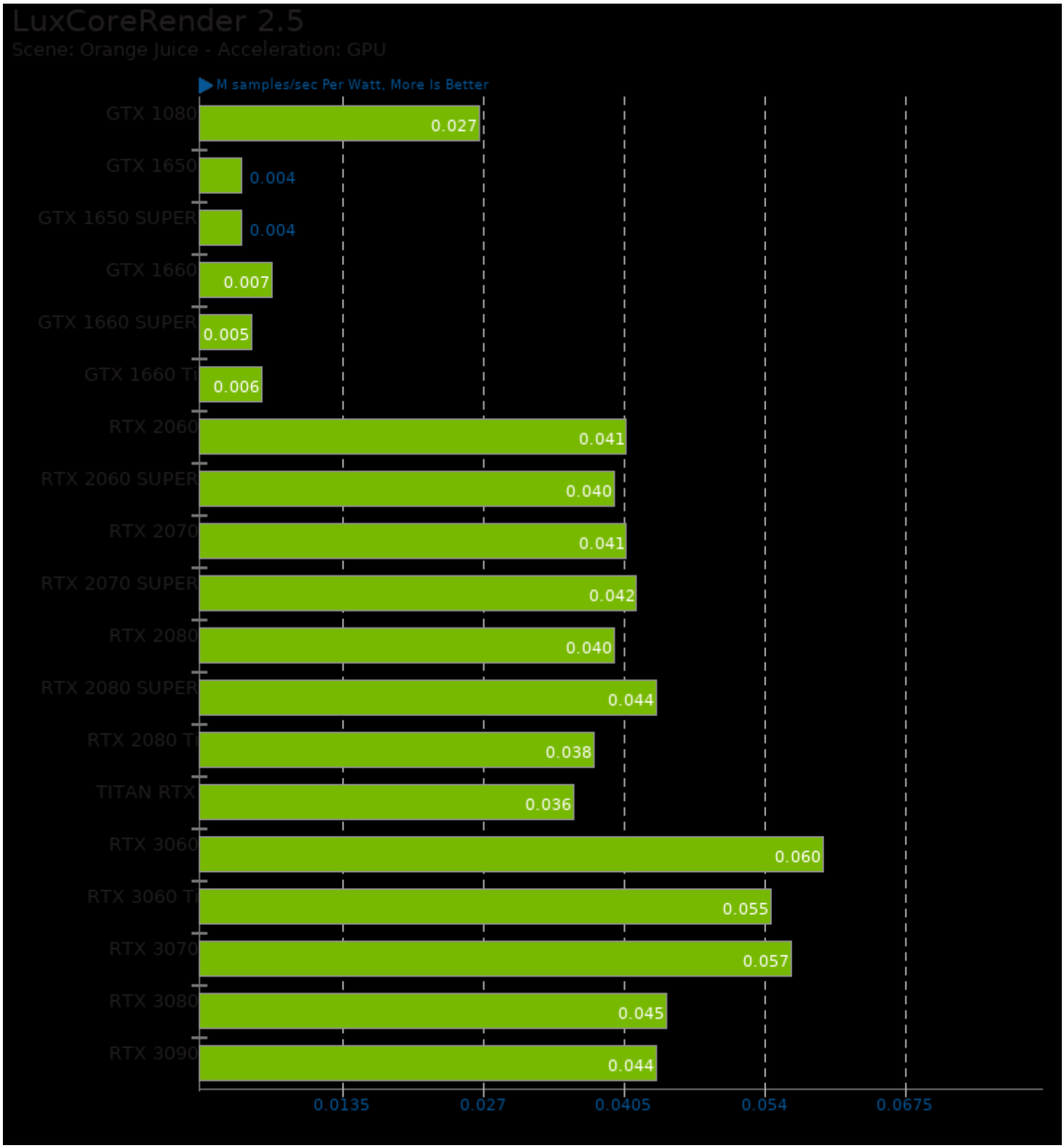
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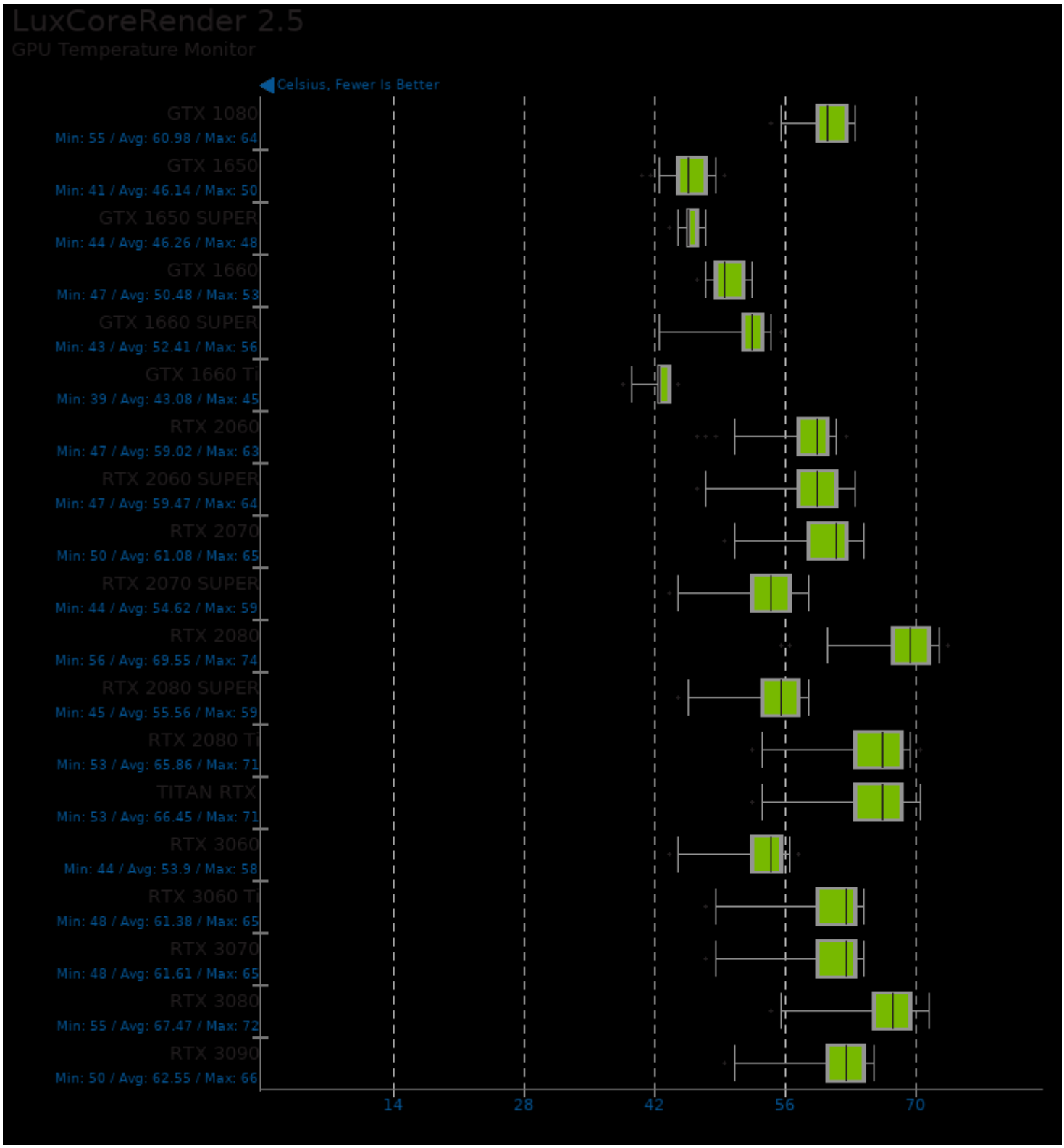
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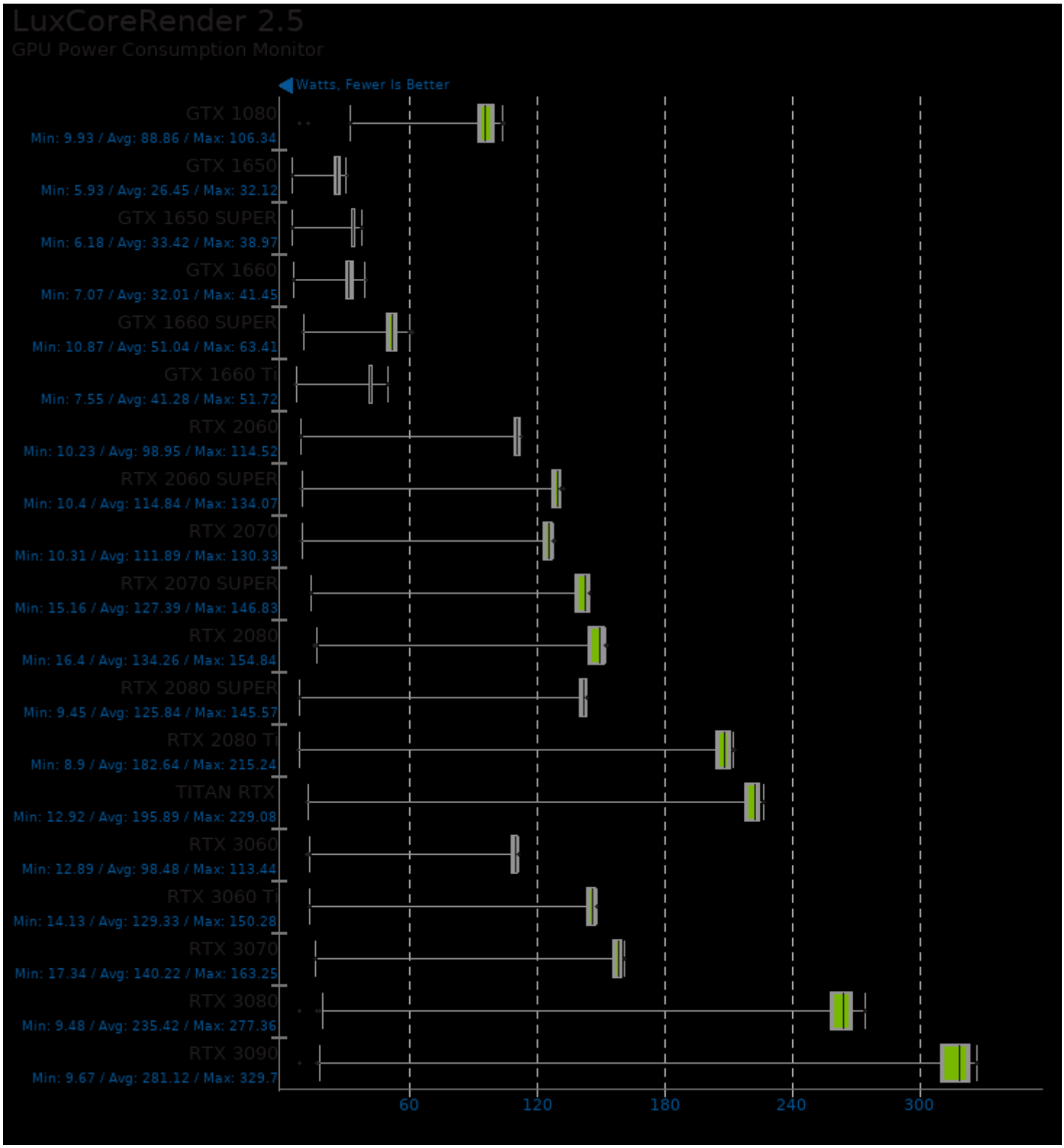
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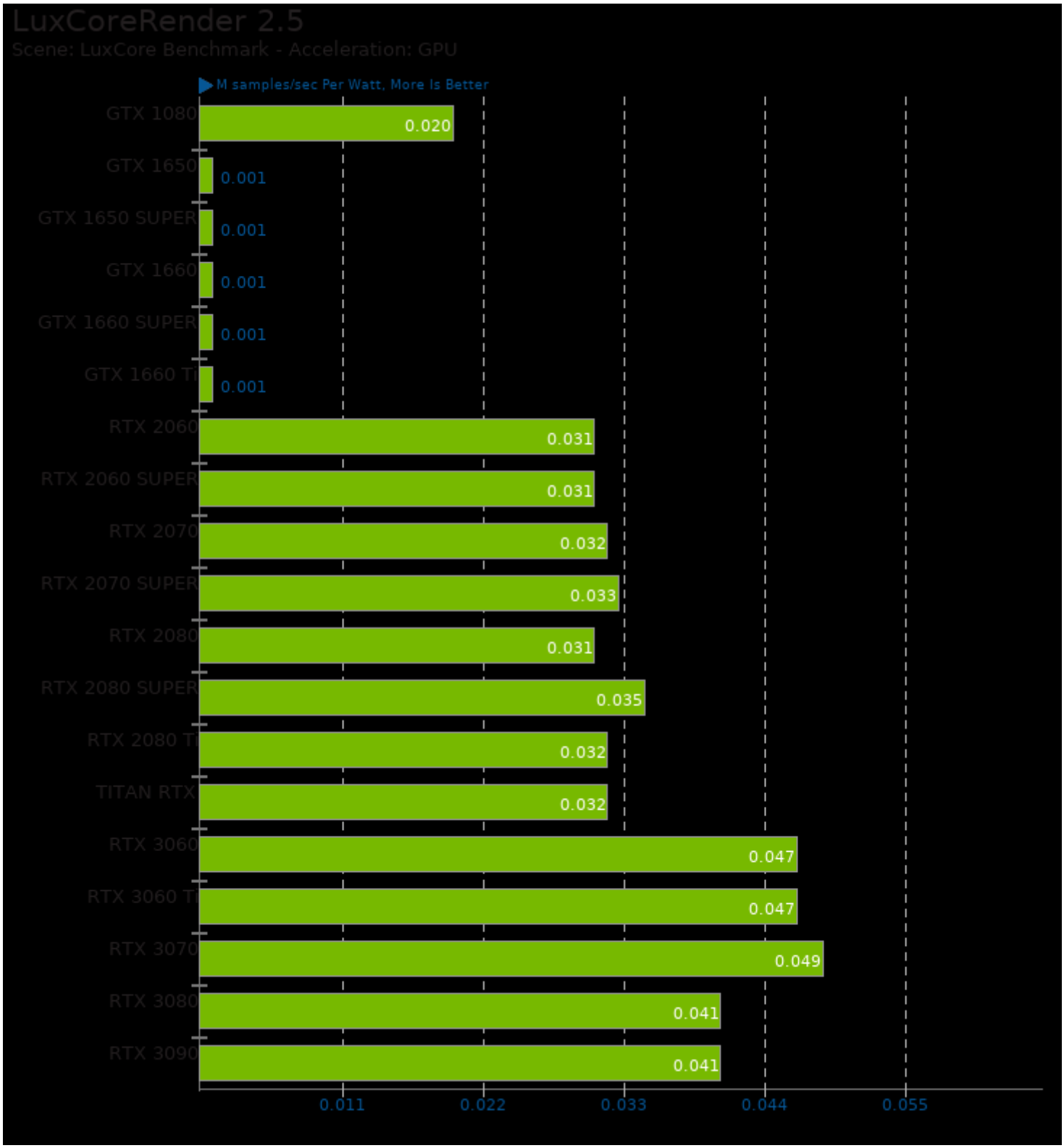
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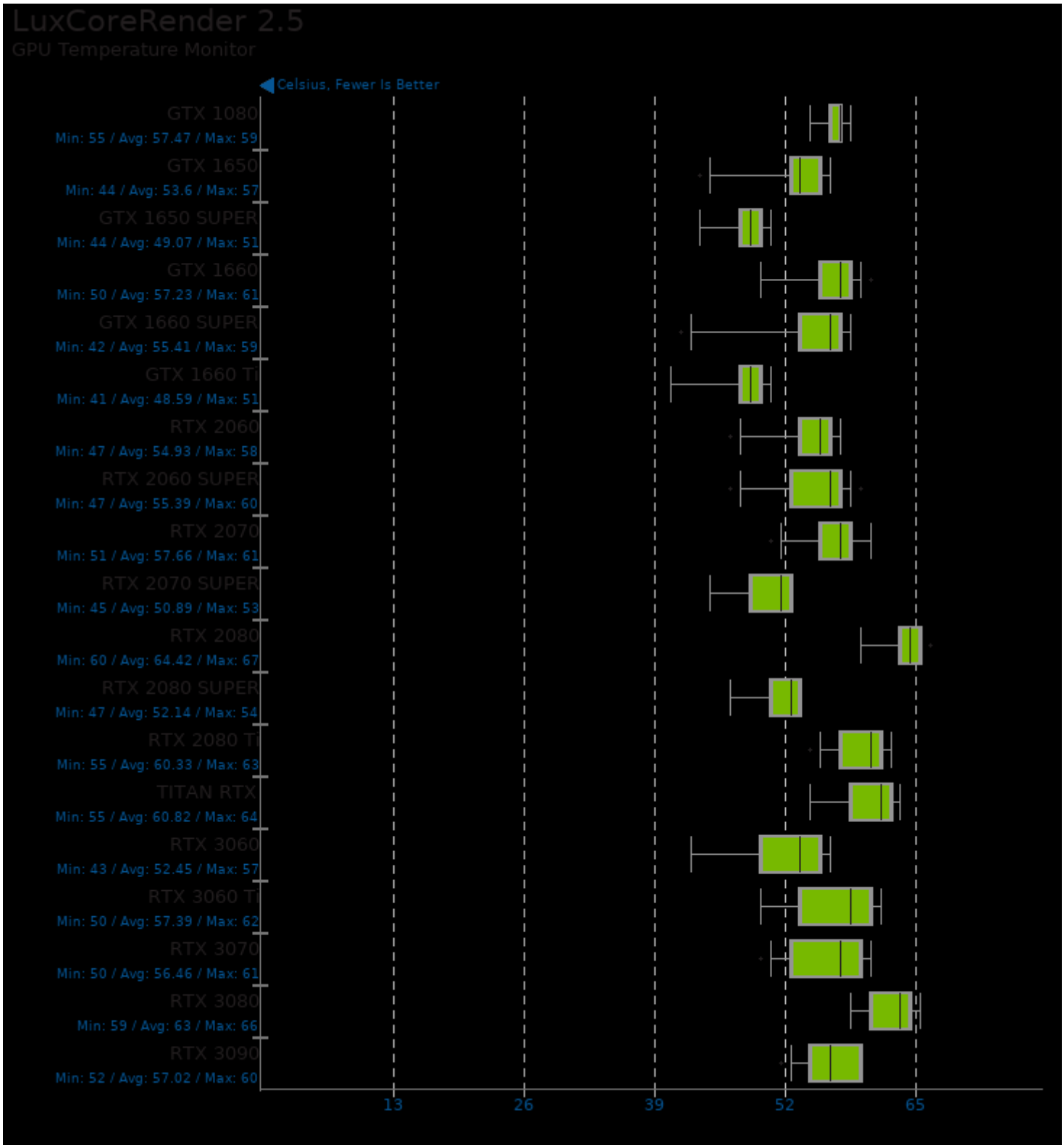
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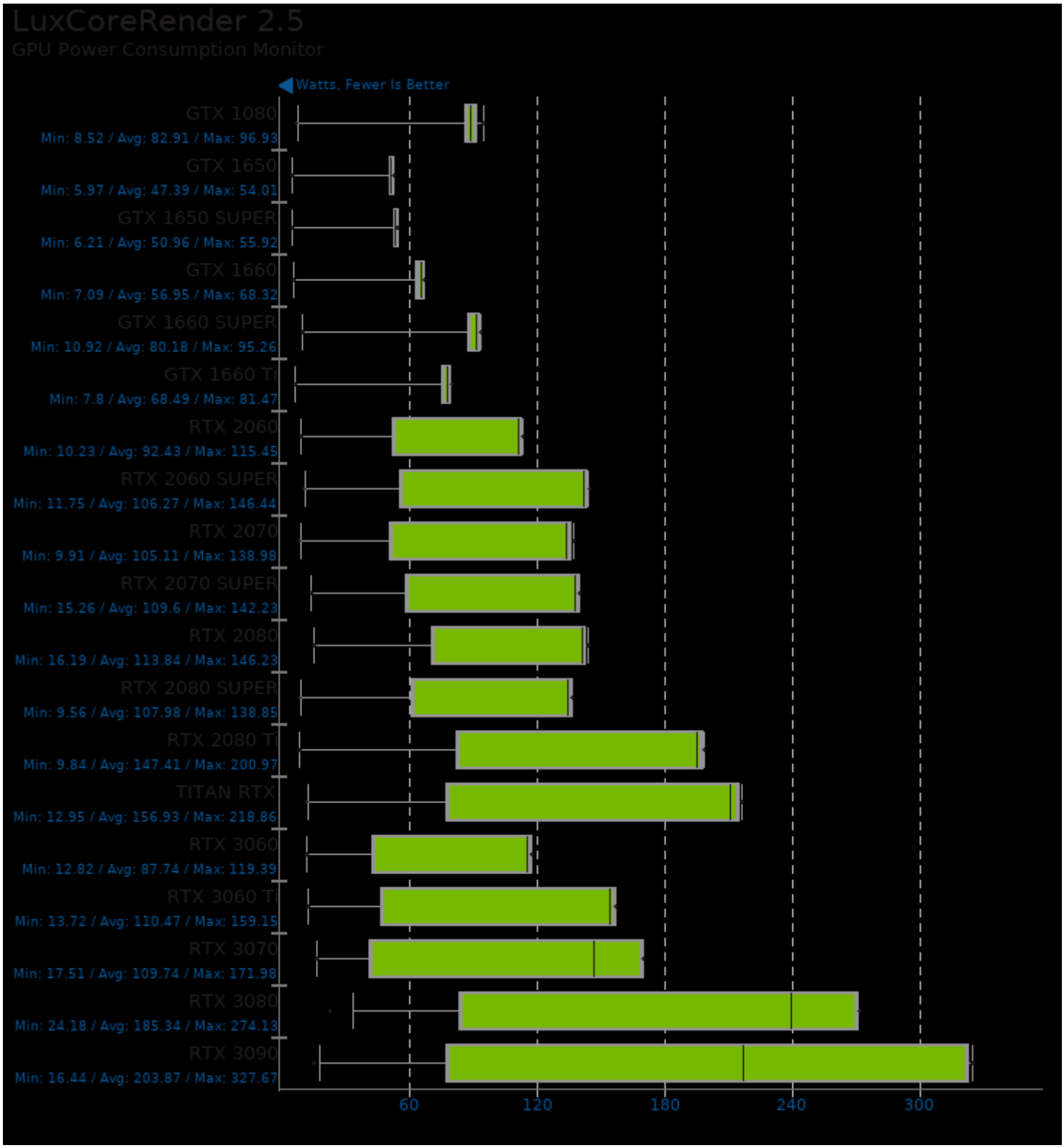
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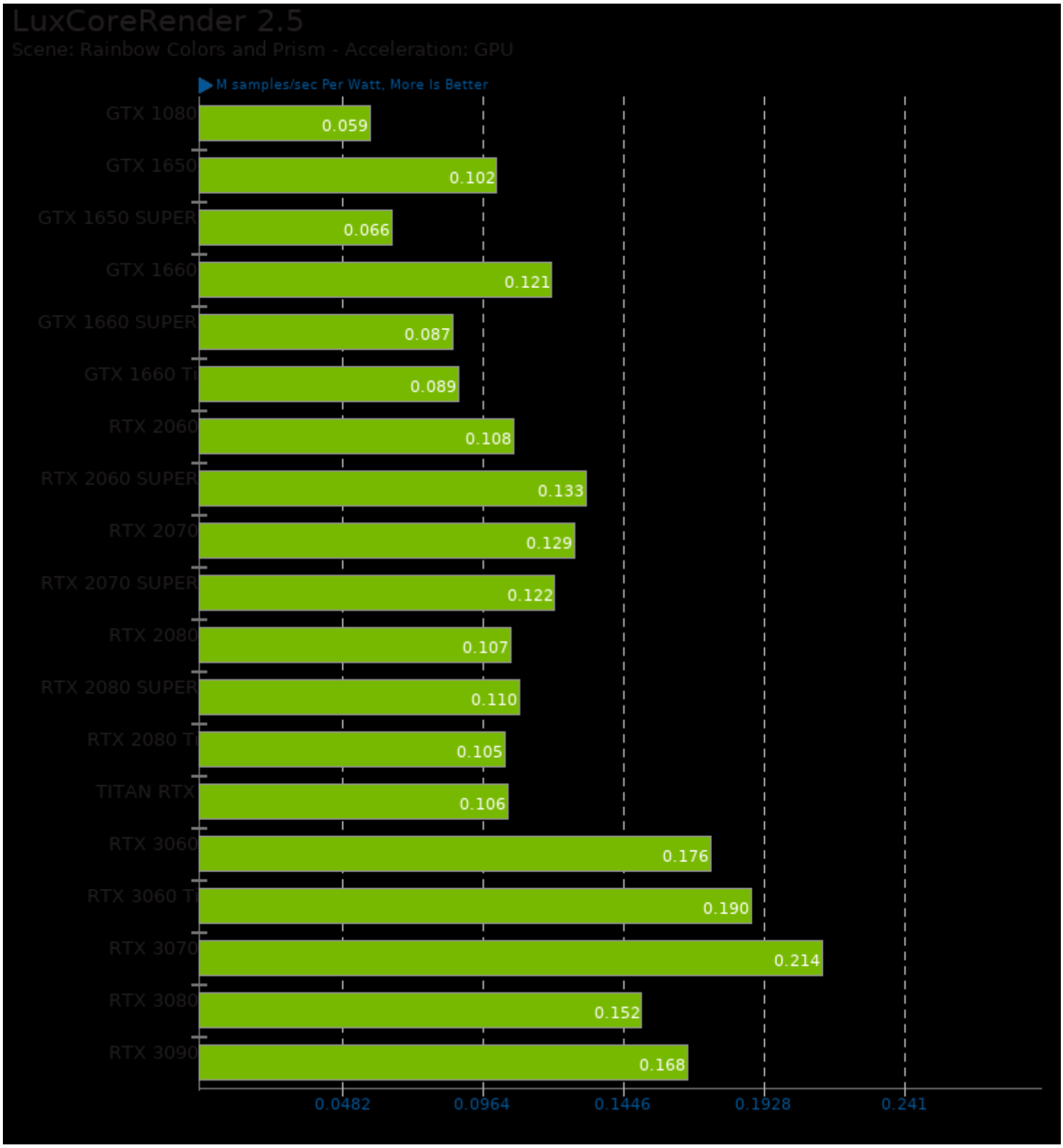
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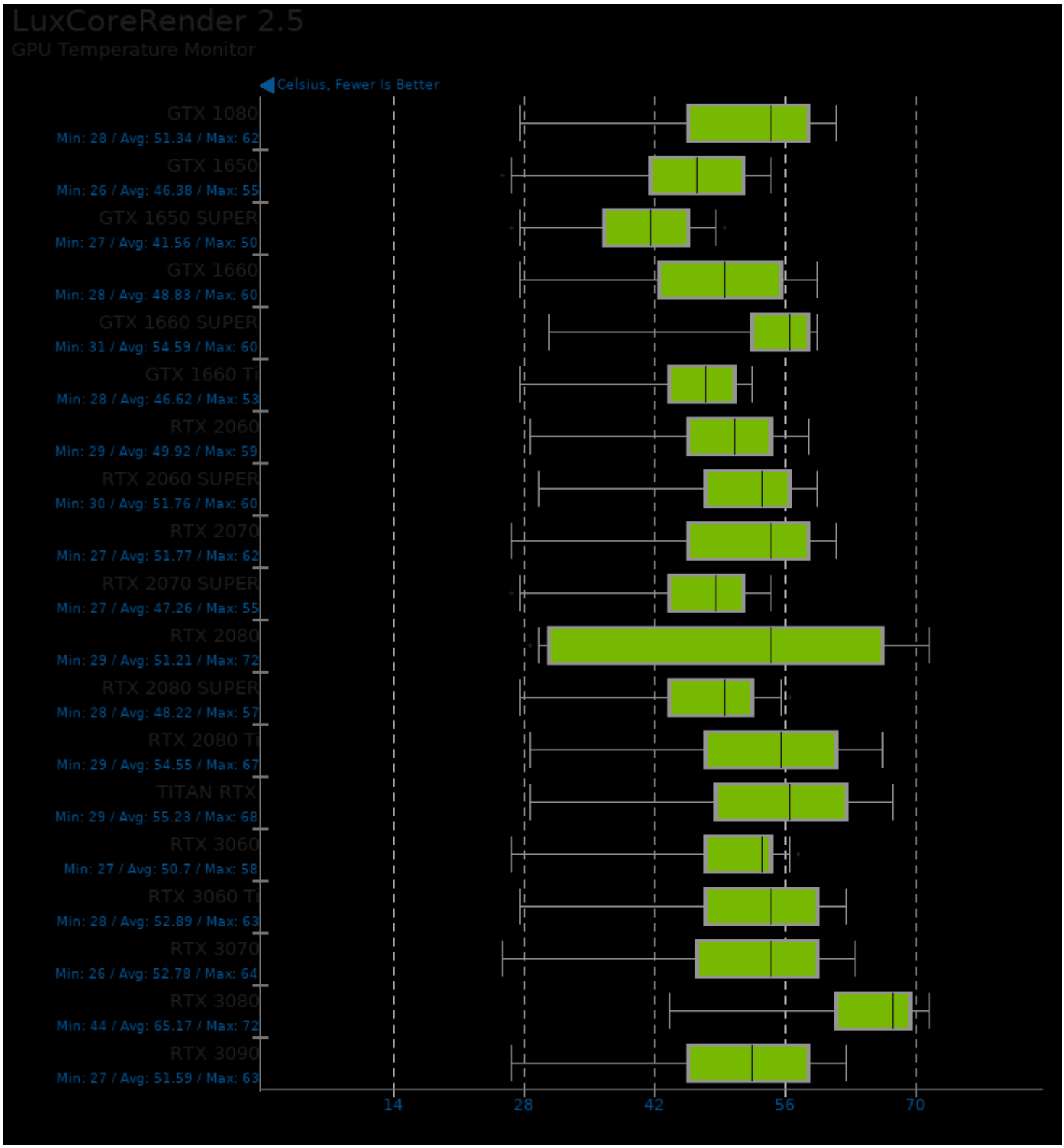
LuxCoreRender 2.5 NVIDIA GPU Render Performance



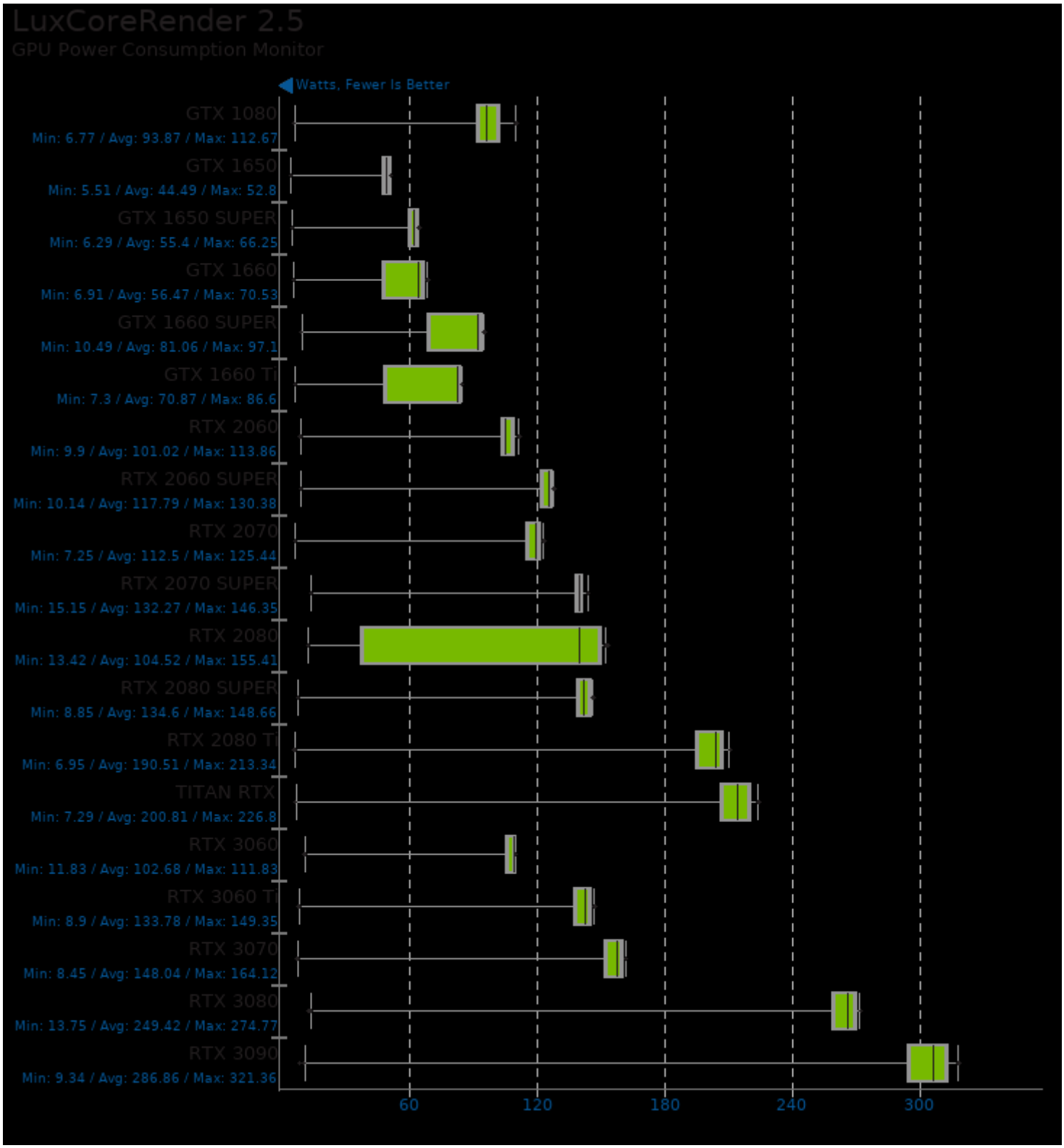
LuxCoreRender 2.5 NVIDIA GPU Render Performance



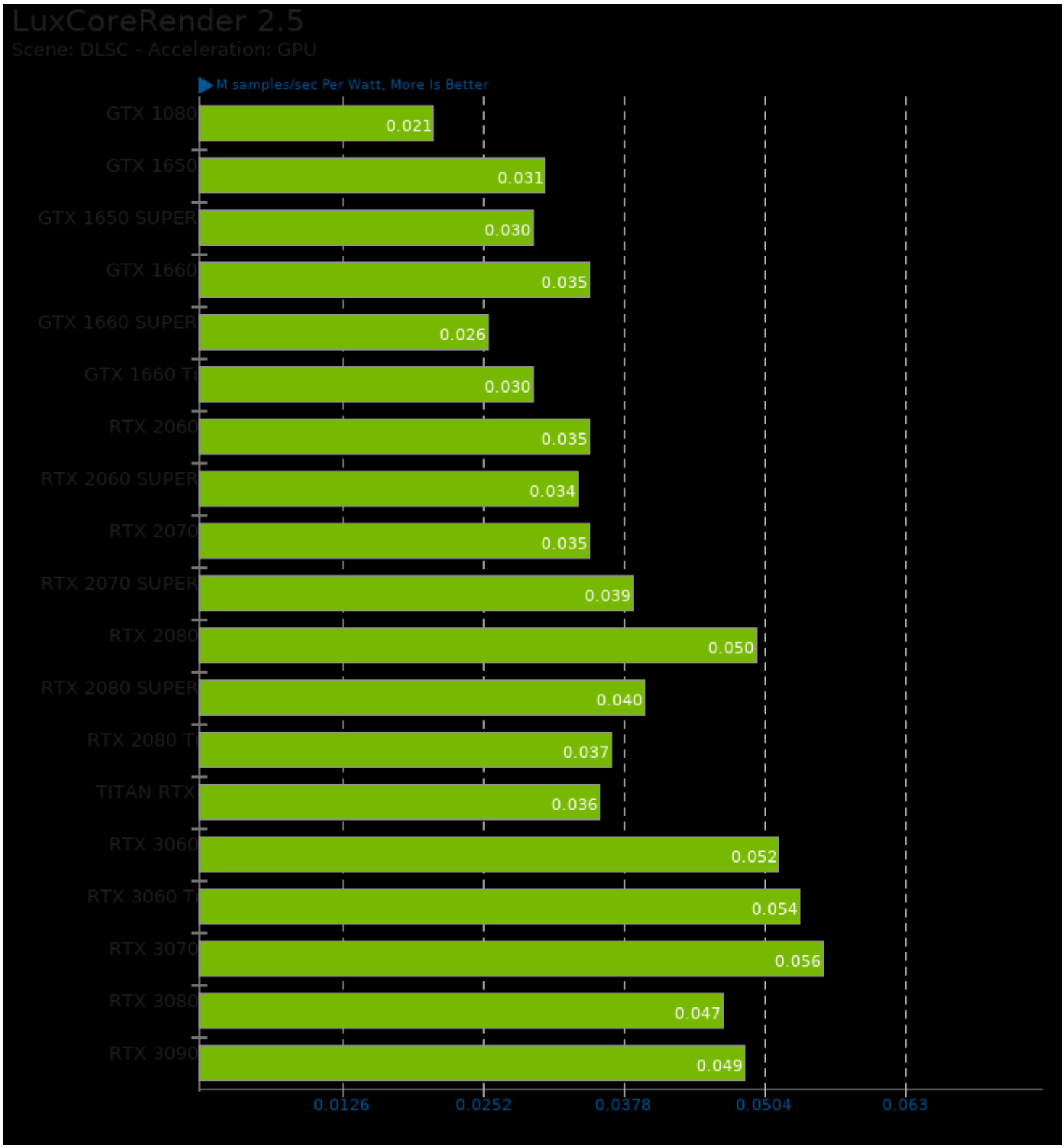
LuxCoreRender 2.5 NVIDIA GPU Render Performance



LuxCoreRender 2.5 NVIDIA GPU Render Performance



LuxCoreRender 2.5 NVIDIA GPU Render Performance



This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 10:08.