Fractal

Fractal Design Define 7 XL (with plain top panel)

Lab ID FDCAS00057

Report Date: Dec 7, 2019

Scheme: DELTA

Noise Rating 

DELTA is a Cybenetics rating. It is not part of our ISO/IEC 17065 certification schemes and is outside our accreditation.

Level assigned with the Chassis Test Protocol Revision 2.0 limits

This chassis was tested before October 2026 with the earlier test procedure. Its result, 2.5 dB, is the measured pink-noise difference of that evaluation and is unchanged. In October 2026 its level was assigned again with the limits of Chassis Test Protocol Revision 2.0: A+ from 8 dB, A from 5 dB, Standard from 2 dB. The earlier procedure is not identical to the Revision 2.0 procedure, so this result is indicative when compared with chassis tested under Revision 2.0.



Aristeidis Bitziopoulos, Certification Body General Manager

General Information

Test Equipment

Test Environment	Hemi-Anechoic Chamber with 6 dB(A) noise floor
Conditions	25(±2) degrees Celsius, 40-50% humidity

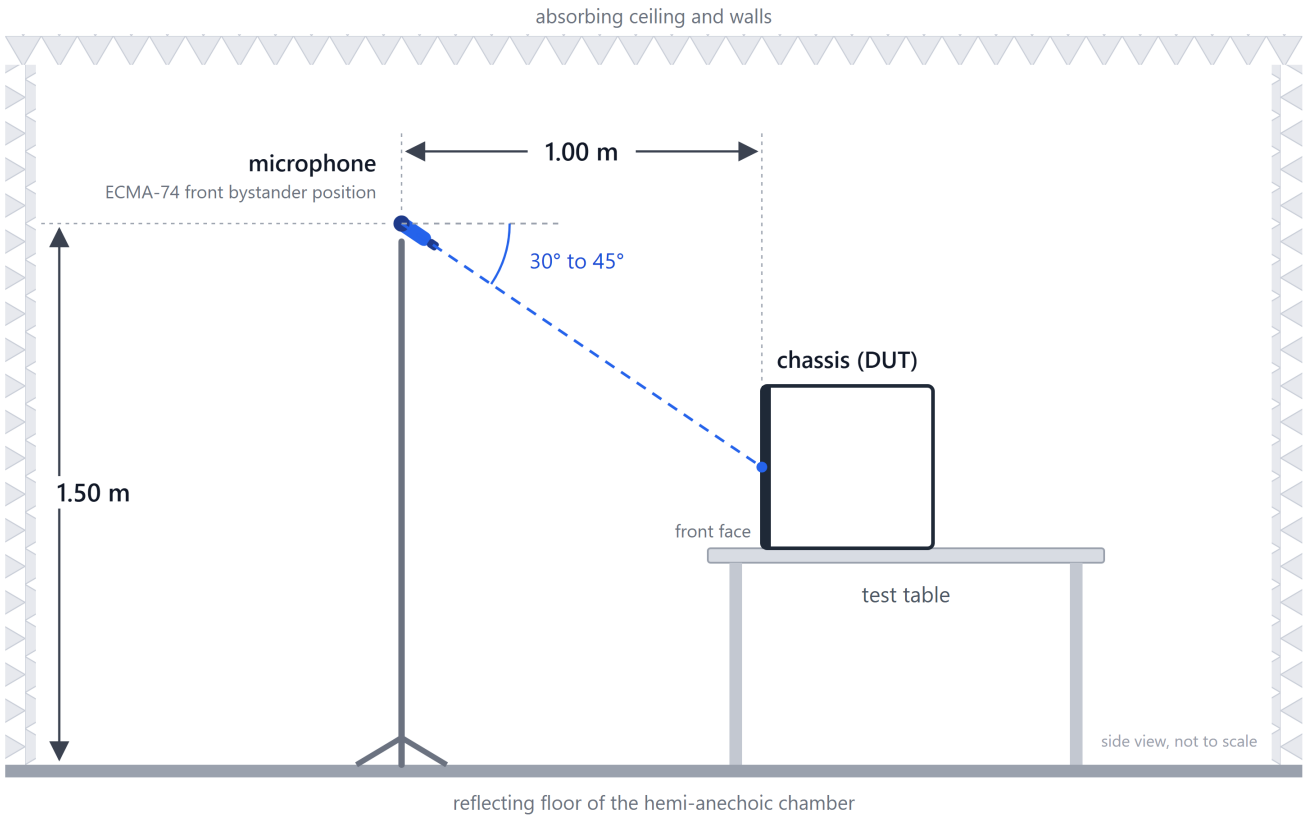
Sound Analyzer	Bruel & Kjaer 2270-S G4 & 2250-L G4
Microphone	Bruel & Kjaer Type 4955-A
Mic Calibrator	Bruel & Kjaer Type 4231
Data Logger	Picoscope TC-08

Technical Specifications Table

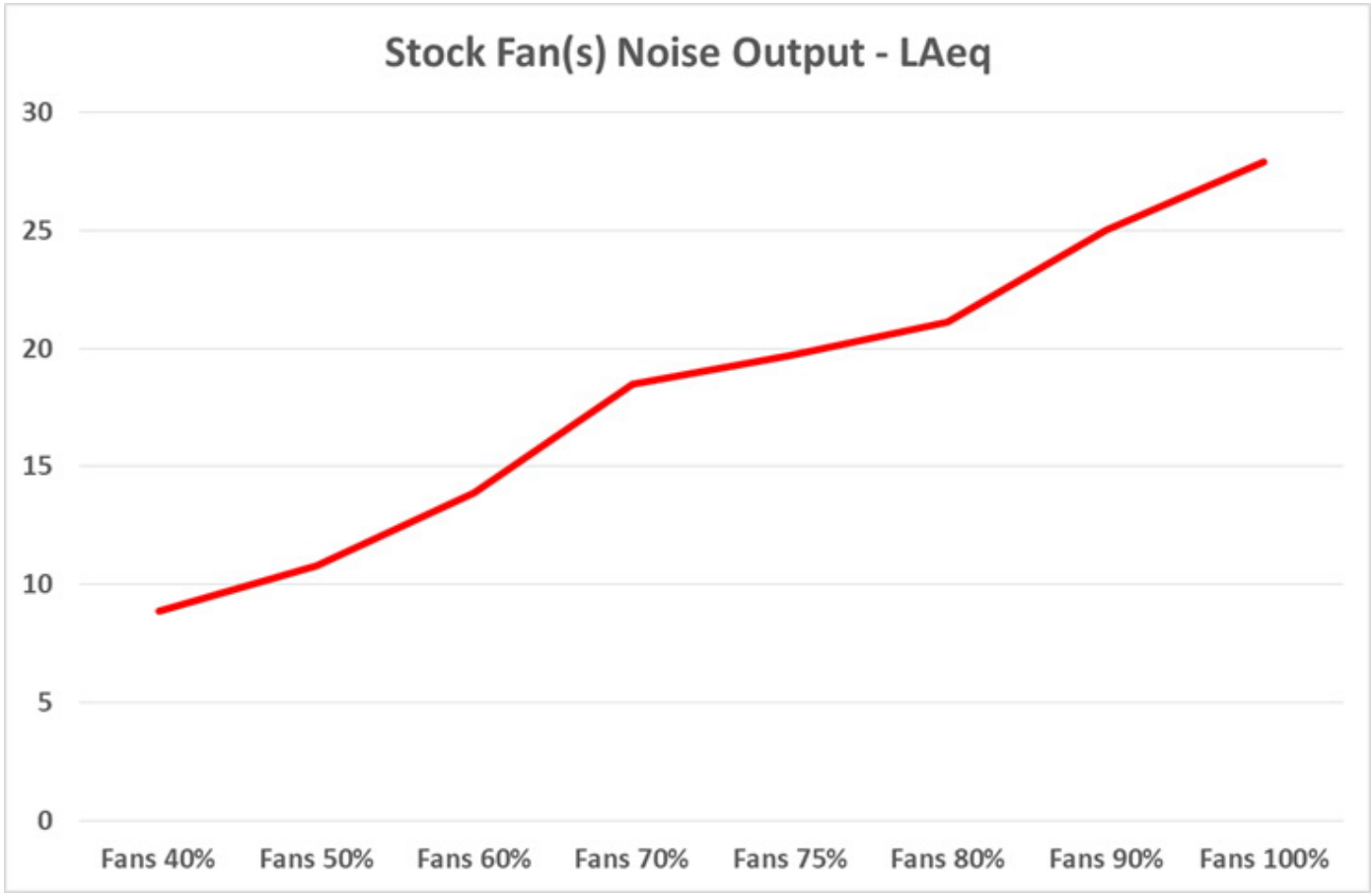
Brand	Fractal Design
Product Name	Define 7 XL
Type	Full Tower
Dimensions (LxWxH)	590 x 240 x 560mm
Motherboard Support	Mini-ITX, Micro-ATX, ATX, E-ATX, XL-ATX
Removable Motherboard Tray	No
Front Door/Cover	Yes
Materials Body	Steel, Plastic, Tempered Glass, Sound Dampening Material
Materials Side Panel	Left: Tempered Glass Right: Sound-Dampened Steel
Expansion Slots	9x (plus three vertical)
Drive Bays	5.25": 2x External 3.5" : 6x Internal (compatible with 2.5") 2.5" : 4x Internal
I/O Panel	1x audio jack, 1x mic jack, Reset Button, 1x USB 3.1 Gen 2 Type-C, Power Button, 2x USB 2.0, 2x USB 3.0 (up to here)
Pre-installed Fan(s)	Front: 2x 140mm (1000 RPM) Rear: 1x 140mm (1000 RPM) Top: *
Fan Support	Front: 4x 120mm / 3x 140mm Top: 4x 120mm / 3x 140mm Rear: 1x 120mm / 1x 140mm
Fan Bearing Type	Enhanced Sleeve Bearing
Fan Power Connector	3-Pin
Fan/LED Controller	Fan Controller (six 3-pin & thee PWM)
Radiator Support	Front: 120 / 240 / 360mm, 140 / 280 / 420mm / 480mm Top: 120 / 240 / 360 / 480mm, 140 / 280 / 420mm Rear: 120mm, 140mm
CPU Cooler Height (Max)	190mm

VGA Length (Max)	500mm
PSU Length (Max)	250mm
Behind MB Tray Clearance/Cable Management Support	24-35mm
Dust Filters	Top, Front, Bottom
PSU Support	Bottom ATX
Weight	15.4 kg (14.9 kg with plain top panel)
Warranty	No info

Noise Measurements Test Set Up



Stock Fan(s) Noise Output – LAeq

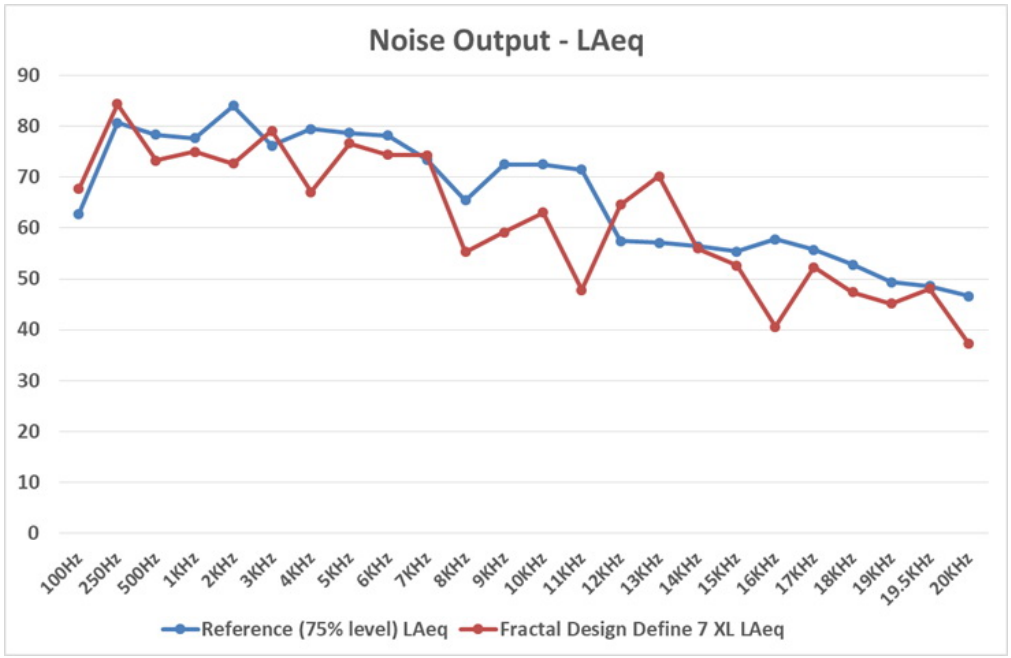


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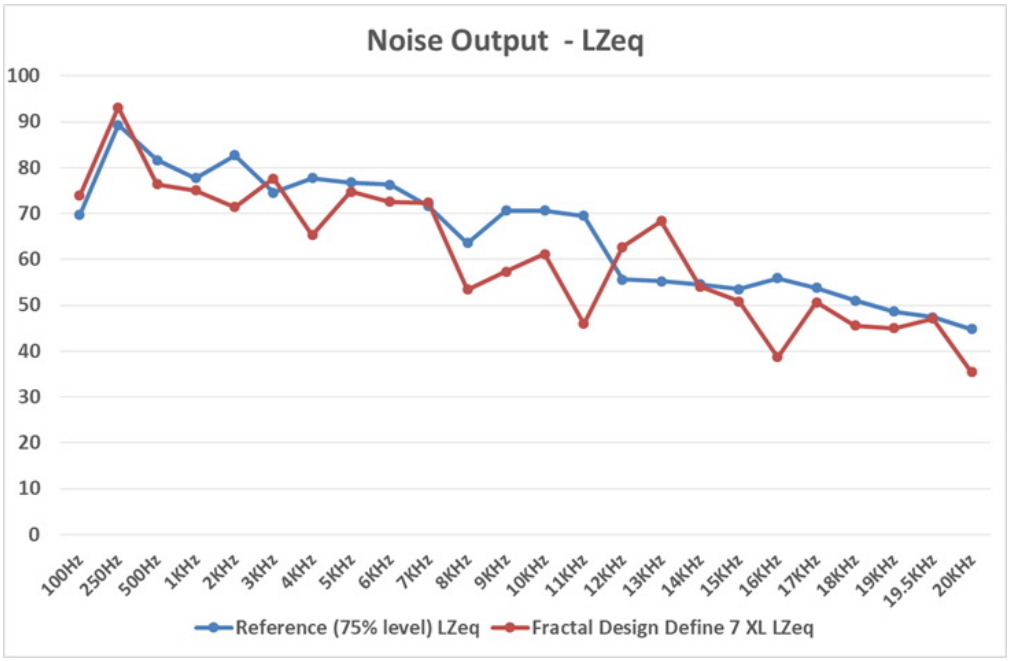
Stock Fan Noise Output from 40% to 100%

Noise Output

LAeq

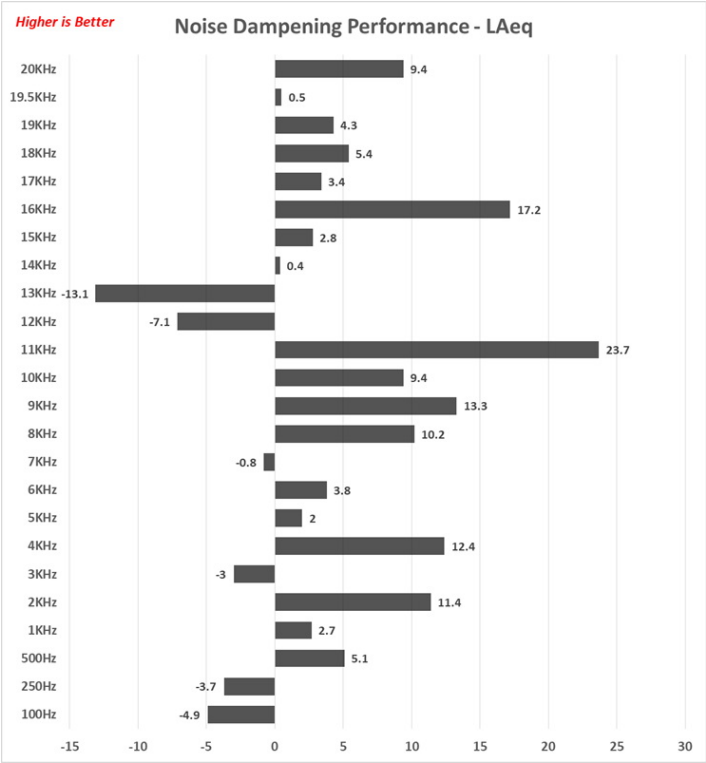


LZeq

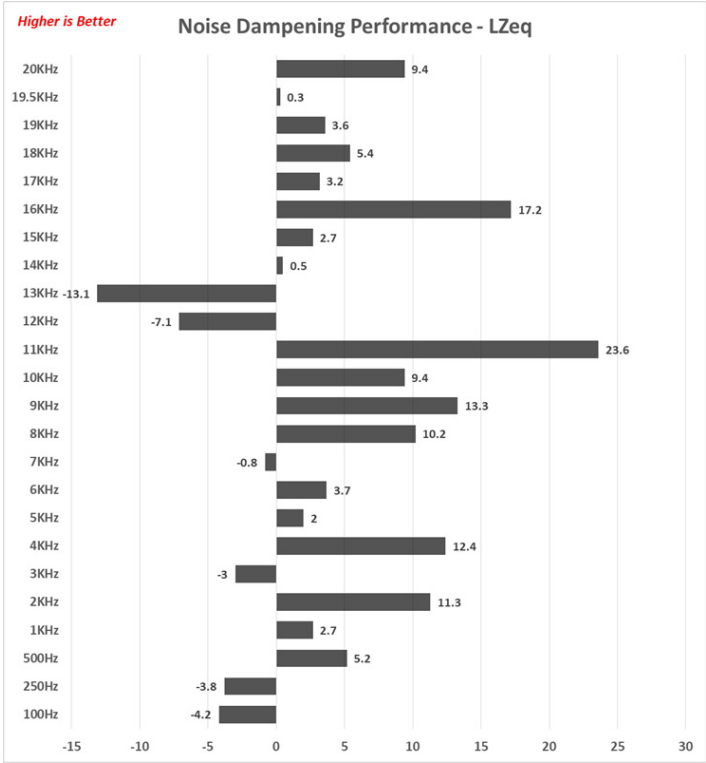


Noise Dampening Performance – Test Tones

LAeq

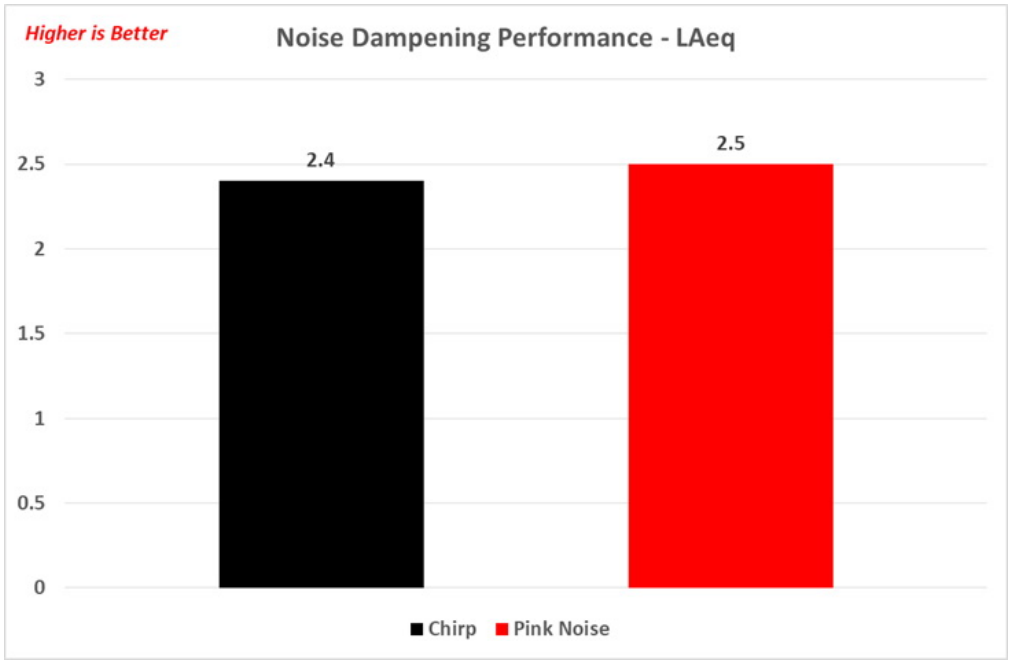


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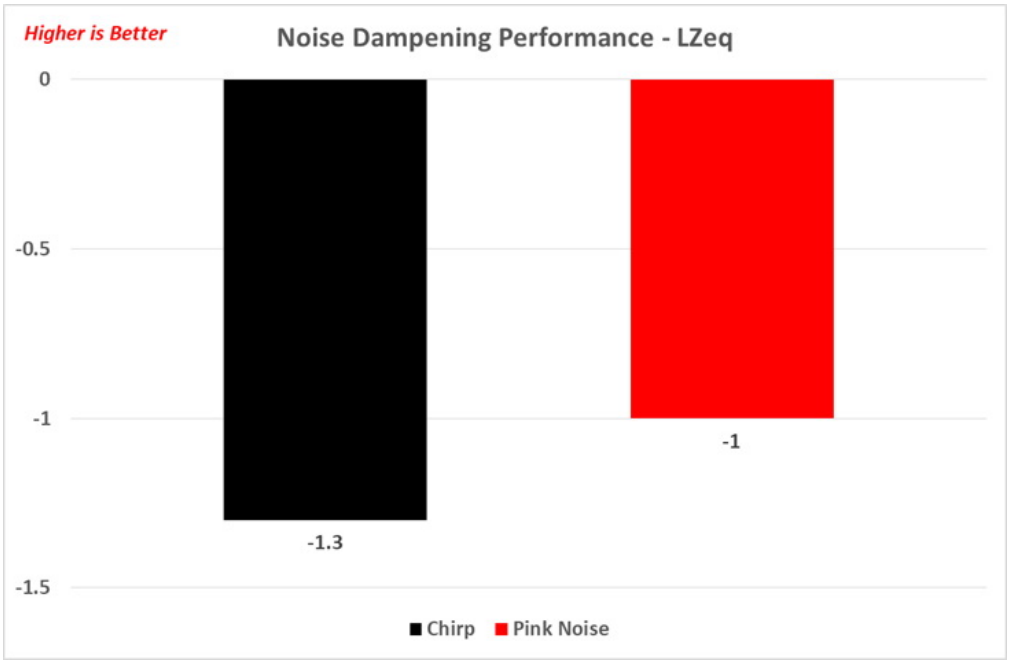


Noise Dampening Performance – Pink & Chirp

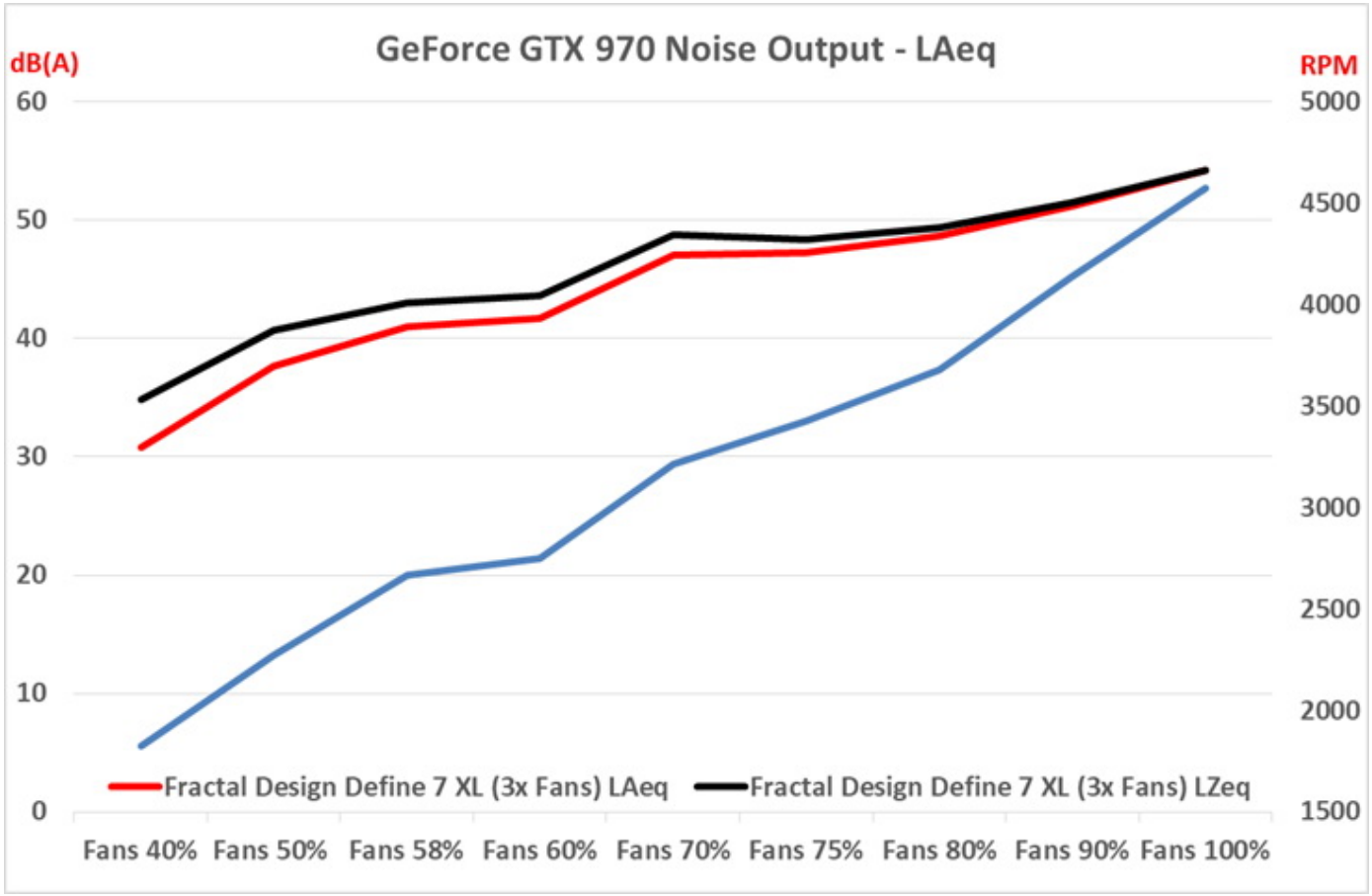
LAeq



LZeq



GPU Fan(s) Noise Output – Laeq



INFO

NVIDIA GeForce GTX 970 Noise Output from 40% to 100% Fan Speed

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Case Photo



Case Photo #2

All data and graphs included in this test report can be used by any individual on the following conditions:
› It should be mentioned that the test results are provided by Cybenetics
› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

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