



**TEST EQUIPMENT**

<b>Test Environment</b>	<b>Hemi-Anechoic Chamber with 6 dB(A) noise floor</b>
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

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## Evaluation Report

Pro Gamersware HAVN HS420

### TECHNICAL SPECIFICATIONS TABLE

Brand	HAVN
Product Name	HS420 and HS420 VGPU
Type	Mid Tower
Dimensions (LxWxH)	541 x 259.5 x 547mm
Motherboard Support	E-ATX, ATX, Micro-ATX, Mini-ITX
Materials Body	Steel, Plastic, Tempered Glass
Materials Side Panel	Left: Tempered Glass Right: Mesh Panel
Expansion Slots	6x (in the VGPU: 6x horizontal and 4x vertical)
Drive Bays	3.5 " : 4x Internal 2.5" : 8x Internal
I/O Panel	1x USB 3.2 Gen 2 Type-C, 2x USB 3.2 Gen 1, 1x Audio Jack, 1x Power Button
Pre-installed Fan(s)	None
Fan Support	Front: 3x 140mm / 3x 120mm Top:3x 140mm / 3x 120mm Rear (top): 1x 120mm / 1x 140mm Rear (bottom): 1x 120mm / 1x 140mm Bottom:3x 140mm / 3x 120mm
FAN Hub	2x (with 6 connectors each)
Radiator Support	Front: 120 / 140 / 240 / 280 / 360 / 420mm Right: 120 / 140 / 240 / 280 / 360 / 420mm Bottom:120 / 140 / 240 / 280 / 360 / 420mm (no bottom radiator support in the VGPU)
CPU Cooler Height (Max)	185mm
VGA Length (Max)	480mm (in the VGPU: 470mm)
PSU Length (Max)	220mm
Behind MB Tray Clearance/Cable Management Support	30mm
Dust Filters	Top, Side, Bottom
PSU Support	ATX
Warranty	2 Years

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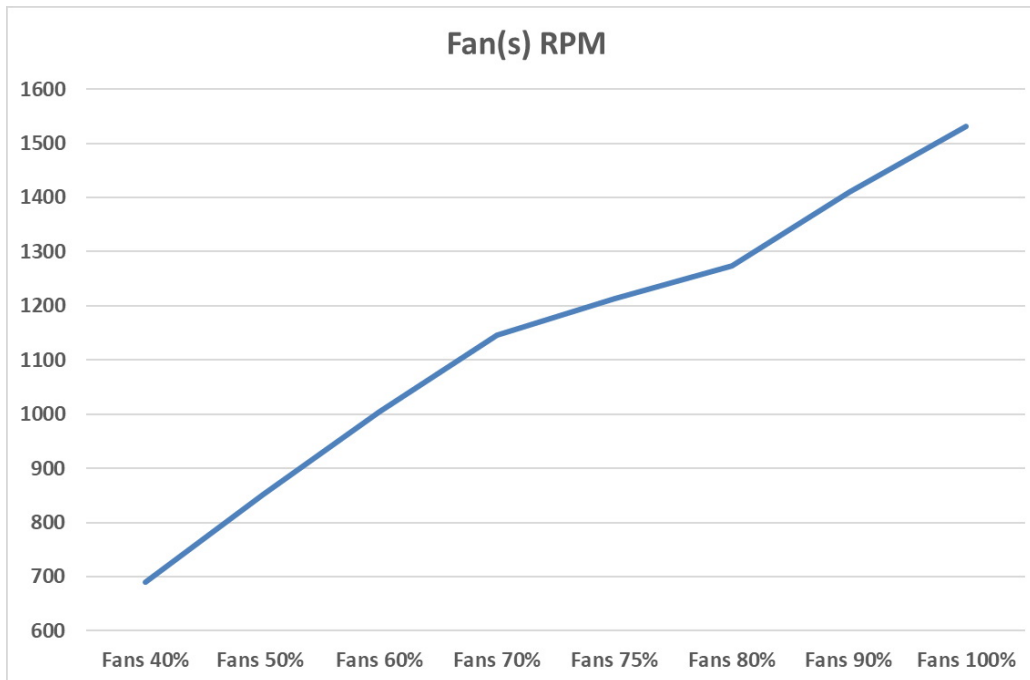
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## Evaluation Report

Pro Gamersware HAVN HS420

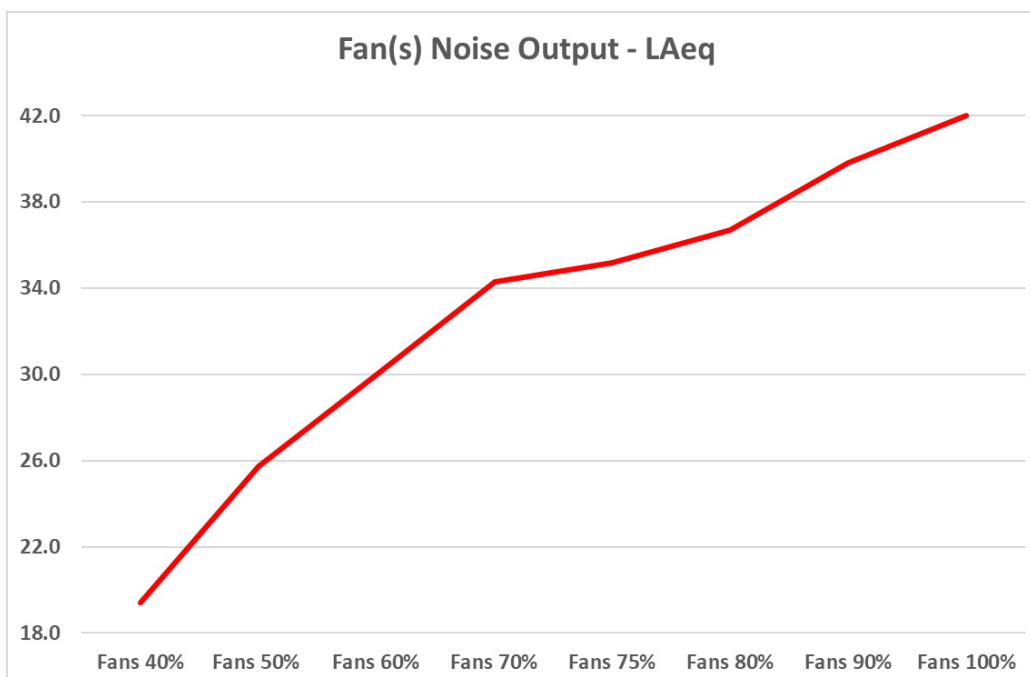
### Stock Fan(s) RPM



#### INFO

Stock Fan Speed from 40% to 100%

### Stock Fan(s) Noise Output - LAeq



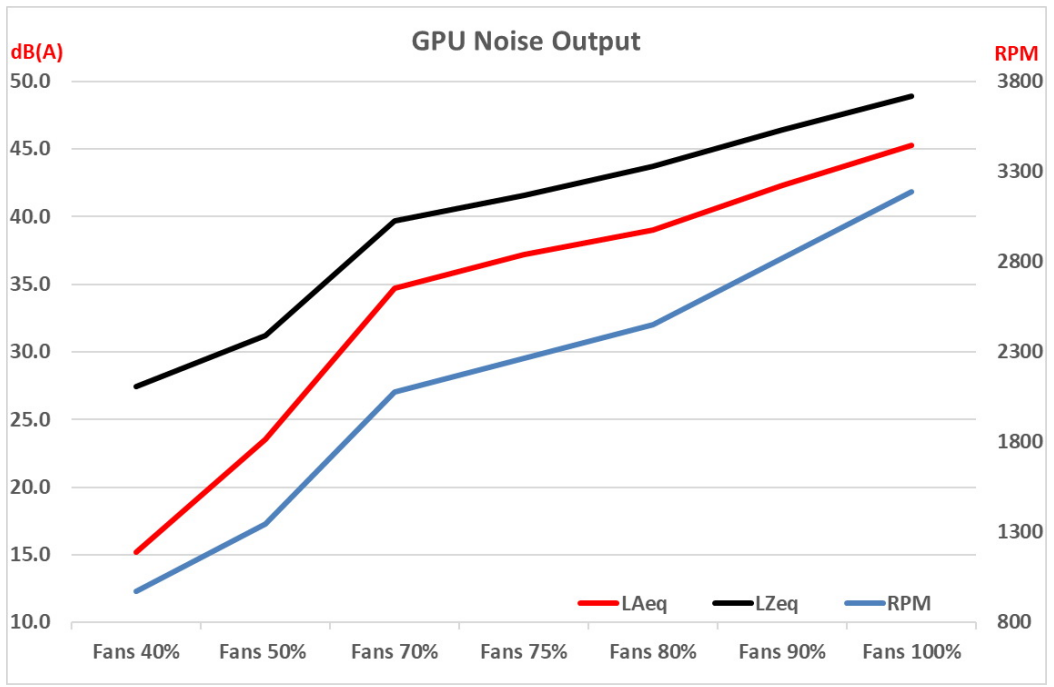
#### INFO

Stock Fan Noise Output from 40% to 100%

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**GPU Fan(s) Noise Output - LAeq**



Galax GeForce RTX 4060 EX Noise Output from 40% to 100% Fan Speed

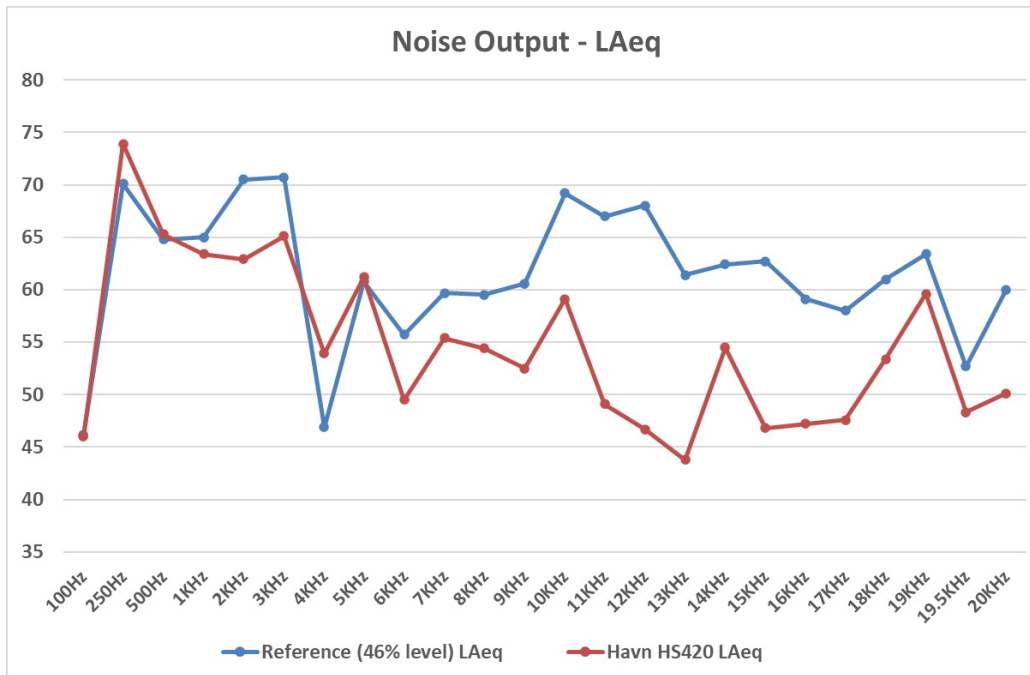
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Pro Gamersware HAVN HS420

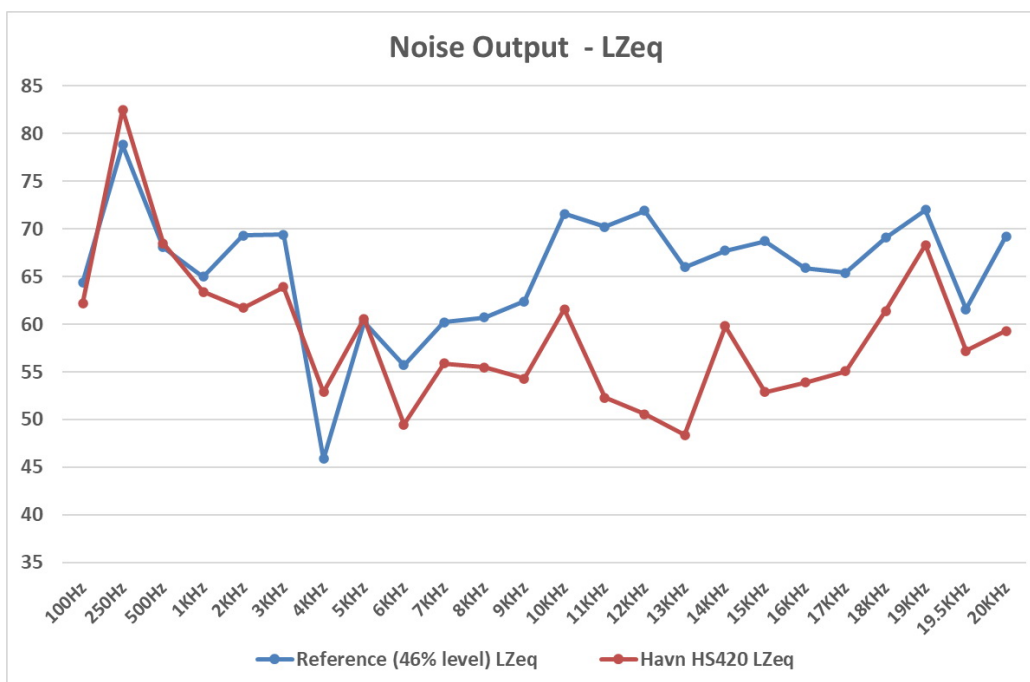
### Noise Output LAeq - Test Tones



#### INFO

Noise Output in DB(A) from 100 Hz to 20 kHz

### Noise Output LZeq - Test Tones



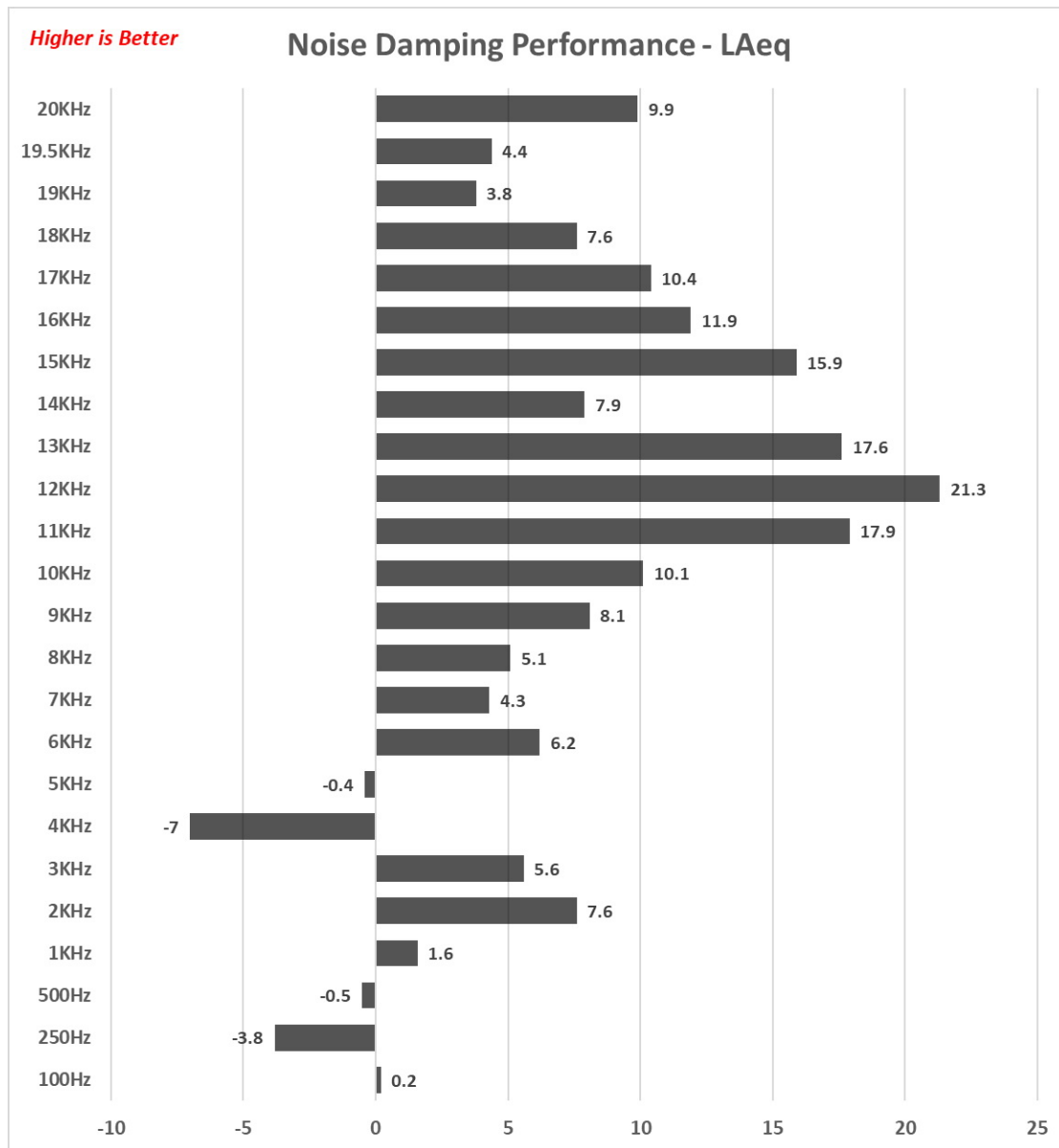
#### INFO

Noise Output in DB(Z) from 100 Hz to 20 kHz

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**Soundproof Performance LAeq - Test Tones**

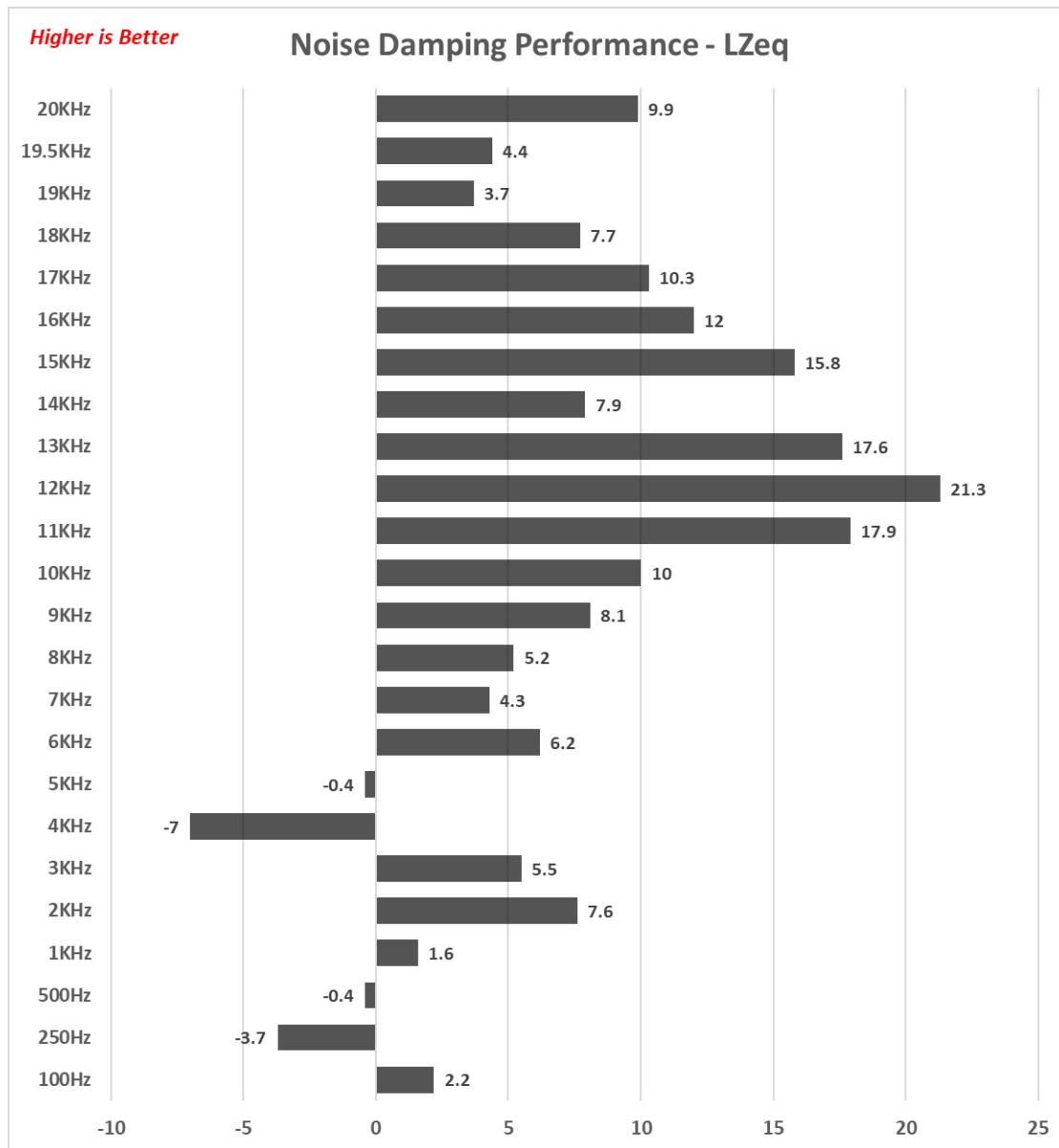


Soundproof Performance in dB(A) from 100 Hz to 20 kHz

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**Soundproof Performance LZeQ - Test Tones**



Soundproof Performance in dB(Z) from 100 Hz to 20 kHz

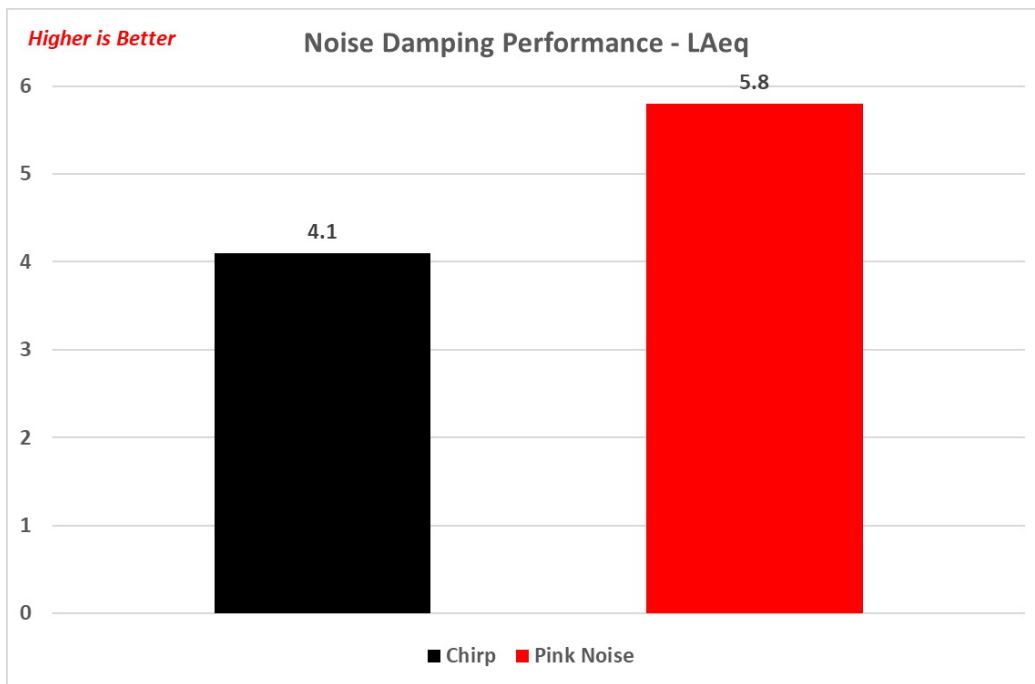
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**Evaluation Report**

Pro Gamersware HAVN HS420

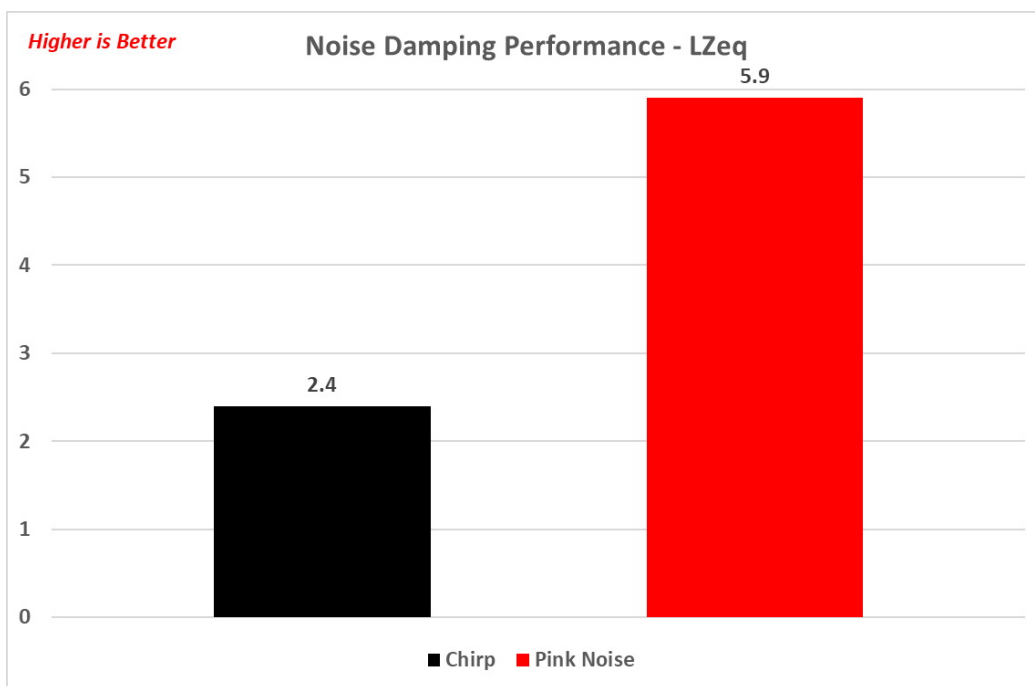
**Soundproof Performance LAeq - Pink & Chirp**



**INFO**

*Chirp & Pink Noise Soundproof Performance (dB[A])*

**Soundproof Performance LZeq - Pink & Chirp**



**INFO**

*Chirp & Pink Noise Soundproof Performance (dB[Z])*

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## Evaluation Report

Pro Gamersware HAVN HS420



Case Photo #1



Case Photo #2

## CERTIFICATIONS



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