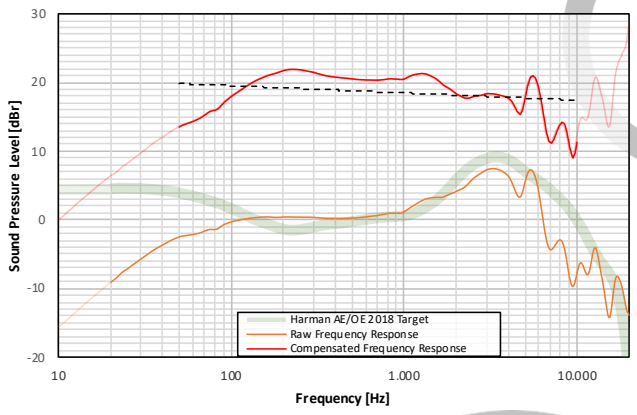
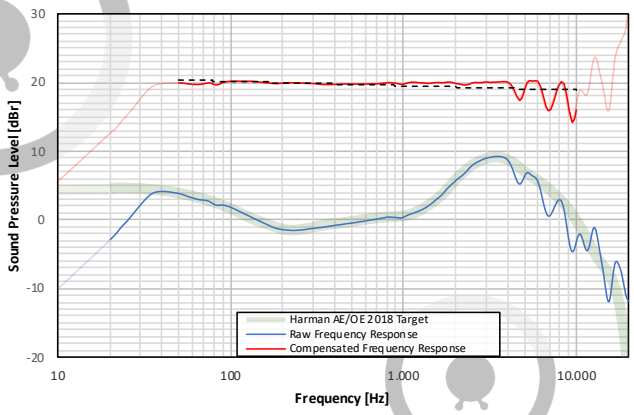
ORATORY1990

EQ setting for Sennheiser HD660S

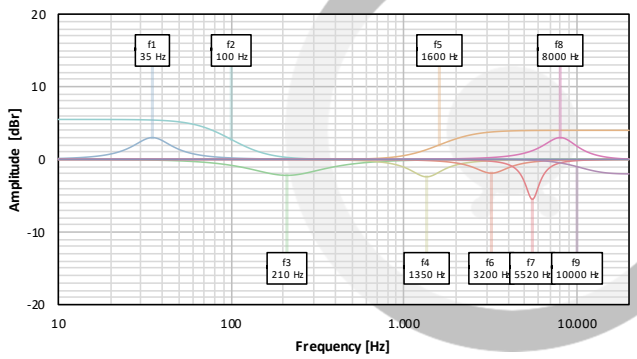
SPL Frequency Response without EQ



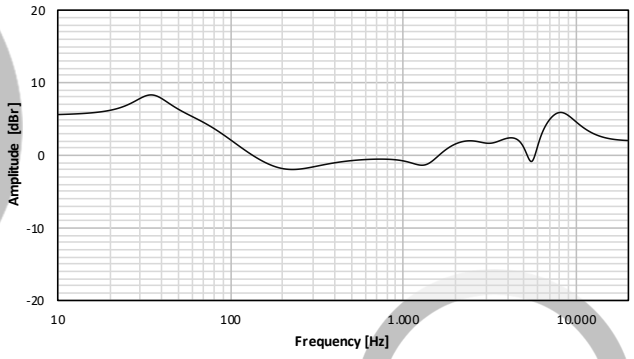
SPL Frequency Response with EQ



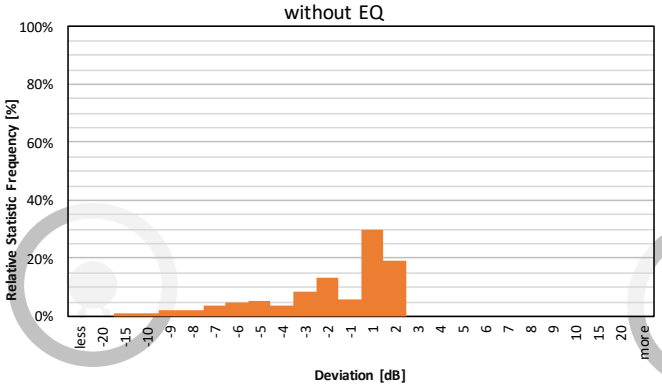
EQ Curve Individual Filters



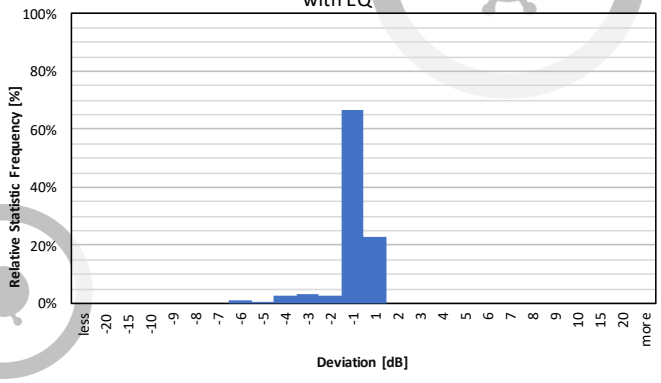
EQ Curve total



Error Curve Histogram without EQ



Error Curve Histogram with EQ



Filter Settings					
	Filter Type	Frequency	Gain	Q-Factor	BW
Band 1	PEAK	35 Hz	3,0 dB	1,5	0,94
Band 2	LOW_SHELF	100 Hz	5,5 dB	0,71	1,89
Band 3	PEAK	210 Hz	-2,2 dB	0,8	1,7
Band 4	PEAK	1350 Hz	-2,4 dB	1,8	0,79
Band 5	HIGH_SHELF	1600 Hz	4,0 dB	0,71	1,89
Band 6	PEAK	3200 Hz	-1,9 dB	1,7	0,84
Band 7	PEAK	5520 Hz	-5,5 dB	3,8	0,38
Band 8	PEAK	8000 Hz	3,0 dB	1,4	1,01
Band 9	HIGH_SHELF	10000 Hz	-2,0 dB	0,71	1,89
Band 10					

Preamp gain:
-8,4 dB

Deviation from Target	
Before EQ	After EQ
2,47 dB	0,42 dB

Preference Rating*	
Before EQ	After EQ
70/100	98/100

Adjust gain of band 1 to preference (subbass)
Adjust gain of band 2 to preference (bass)
Adjust gain of band 3 to preference (warmth/muddiness)
Adjust gain of band 4 to preference (midrange accuracy / shoutiness)
Adjust gain of band 5 to preference (treble)
Adjust gain of band 8 to preference (sibilance/detail)
Adjust gain of band 9 to preference (airiness)

*preference rating prediction based on:
[1] S. Olive et al: "A Statistical Model That Predicts Listeners' Preference Ratings of In-Ear Headphones: Part 1" (2017)
[2] S. Olive et al: "A Statistical Model That Predicts Listeners' Preference Ratings of In-Ear Headphones: Part 2" (2017)
[3] S. Olive et al: "A Statistical Model That Predicts Listeners' Preference Ratings of Around-Ear and On-Ear Headphones" (2018)
The normalized preference ratings are used, where zero deviation from target equals a preference rating of 100

measured on GRAS45BC KEMAR
GRAS KB5000/5001 anthropometric pinnae
APx515 or APx526 Signal Generator/Analyzer
APx1701 amplifier

v2.9
by oratory1990
06.12.21