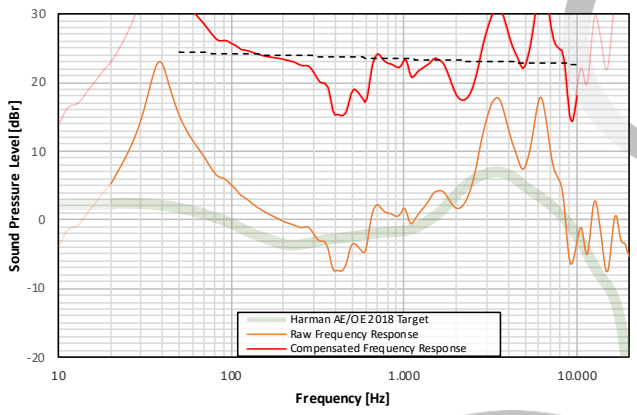
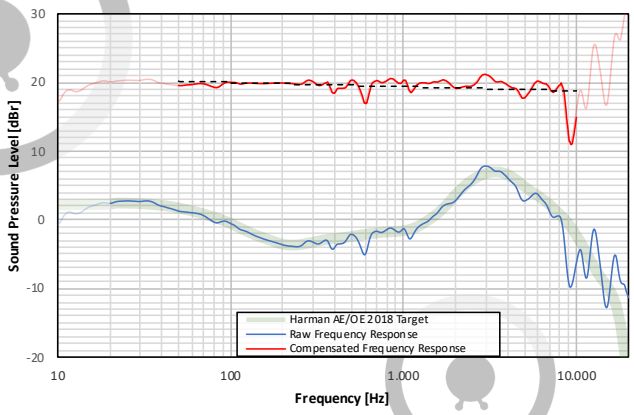
ORATORY1990

EQ setting for Ploopy Headphones

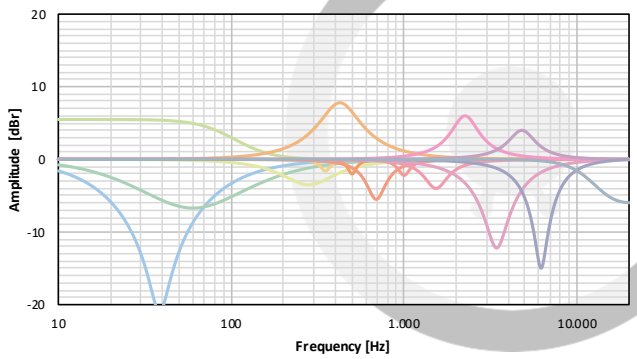
SPL Frequency Response without EQ



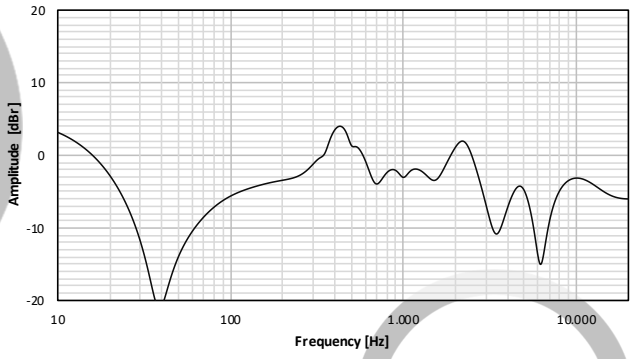
SPL Frequency Response with EQ



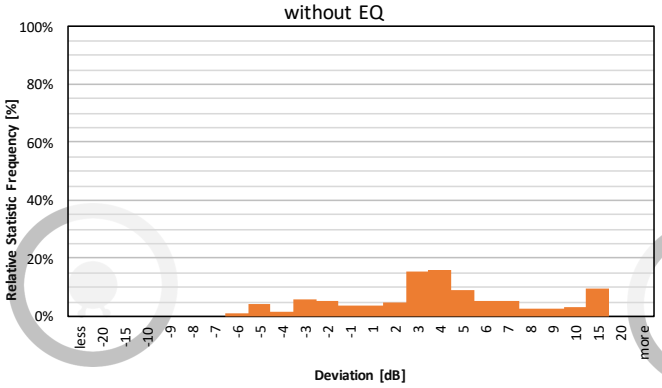
EQ Curve Individual Filters



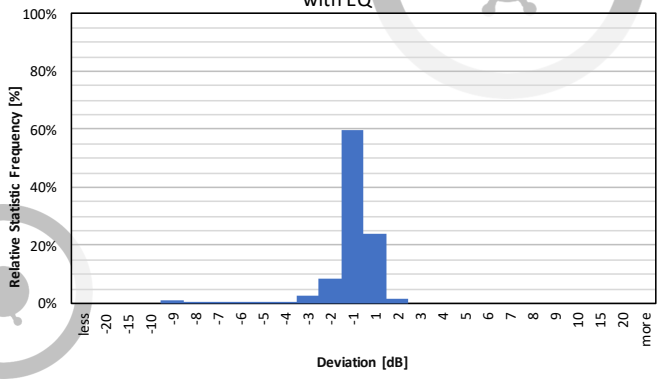
EQ Curve total



Error Curve Histogram without EQ



Error Curve Histogram with EQ



Filter Settings				
	Filter Type	Frequency	Gain	Q-Factor
Band 1	PEAK	38,5 Hz	-21,0 dB	1,4
Band 2	PEAK	60 Hz	-6,7 dB	0,5
Band 3	LOW_SHELF	105 Hz	5,5 dB	0,71
Band 4	PEAK	280 Hz	-3,5 dB	1,1
Band 5	PEAK	350 Hz	-1,6 dB	6,0
Band 6	PEAK	425 Hz	7,8 dB	1,3
Band 7	PEAK	500 Hz	-2,0 dB	7,0
Band 8	PEAK	690 Hz	-5,5 dB	3,0
Band 9	PEAK	1000 Hz	-2,2 dB	5,0
Band 10	PEAK	1530 Hz	-4,0 dB	2,5
Band 11	PEAK	2250 Hz	6,0 dB	2,0
Band 12	PEAK	3430 Hz	-12,2 dB	2,0
Band 13	PEAK	4800 Hz	4,0 dB	2,0
Band 14	PEAK	6200 Hz	-15,0 dB	3,0
Band 15	HIGH_SHELF	12000 Hz	-6,0 dB	0,71

Preamp gain:
-4,1 dB

Deviation from Target	
Before EQ	After EQ
5,03 dB	0,66 dB

Preference Rating*	
Before EQ	After EQ
55/100	93/100

Adjust gain of band 3 to preference (bass)
Adjust gain of band 15 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-10 KEMAR
GRAS KB5000/5001 anthropometric pinnae
APx515 or APx526 Signal Generator/Analyzer
APx1701 amplifier

v2.9
by oratory1990
09.08.23