	0 0	25	31.5 0	40	50	63	80	100	125	160	200	250															10K	12.5K	20K			
Diffuse field (H&M) Diffuse field (B&K) -1dB/oct room gain		0	0	0													1															
Diffuse field (B&K) -1dB/oct room gain		U			()	Λ	0	0	0	0.5	Λ Ω	1	1 2	1.5	2	3	3.5	1	5	Ω	11	15.5	15.5	12	10.5	10	9.5	7	1	0	-3.6	
-1dB/oct room gain	U	0.3	0.5	0.2	0.3	0.2	0.5	0.3	0.2	0.5	0.8	0.4	1.2	1.5	2.5	2.5	3.5	5	4.7	5.7	10	15.5 15	15.5 17.3		10.5	10.7	9.5	7 4.2	9.2	0	-3.6 -4.5	
-0.9dB/oct room gain	5	4.7	4.5	4.1	3.8	3.5	3.2	2.8	2.6	2.1	1.9	1.5	1.1	0.8	0.5		-0.8	-0.5	-0.3	-1.2		-1.7		-2.4	-2.7	-3	-3.4	-3.8	-4.2	-4.7	-5	
	4.5	4.25	4	3.6	3.3	3	2.7	2.5	2.2	1.7	1.5	1.3	1	0.7	0.3			-0.7	-1	-1.3		-1.8		-2.5	-2.8	-3	-3.3	-3.7	-4	-4.3	-4.5	
B&K room gain	2.5	2.7	2.9	3	3	3	3	2.9	2.8	2.7	2.5	2.2	2	1.8	1.6	1.5	1.1	0.9	0.6	0.3	0	-0.3	-0.5	-1.1	-1.2	-1.6	-2	-2.2	-2.6	-3.1	-3.6	
DF+RG (H&M/B&K)	-0.3	-0.1	0.1	0.2	0.2	0.2	0.2	0.1	0	0.4	0.5	0.4	0.4	0.5	0.8	1.7	1.8	2.1	2.8	5.5	8.2	12.4	12.2	9.1	6.5	5.6	4.7	2	-1.4	-5.9	-10	
DF+RG (B&K/B&K)	0	0.5	0.9	0.7	8.0	0.7	1	0.7	0.5	0.5	0	0.1	0.5	0.6	1.6	1.5	2.6	3.4	2.8	3.5	7.5	12.2	14.3	11.4	7.9	6.6	-2.2	-0.5	4.1	-5.6	-10.6	
DF+ 1dB/oct (H&M)	2.7	2.4	2.2	1.8	1.5	1.2	0.9	0.5	0.3	0.3	0.4	0.2	0	0	0.2	0.9	0.4	1.2	2.4	4.5	7.2	11.5	11.1	8.3	5.5	4.7	3.8	0.9	-2.5	-7	-10.9	
	-1.3	-1.3	-1.3	-1.3	-1.3							-1	-0.8			0.5		2.1	2.7	3.5		11.5	11	8.1	6.6	3.4	2.5	0	-2.5	-4.5	-7	
Harman 2013	3.8	3.8	4	4	3.8	3.6	2.7	2.5	1.5	0.8	0.3	0	1	1.4	1.8	2.1		2.7	3.4	6	7.7			10.4	8	6.6	3.5	0.2	-4	-8	-7	
Harman '13 -2 bass Harman '13 w/o bass	1.8	1.8	0	2	1.8	1.6	1.7	1.5	0.5	0.3	0	0	1	1.4	1.8	2.1		2.7	3.4	6				10.4	8	6.6	3.5	0.2	-4 -4	-8 -8	-7 -7	
Harman 2018	5.5	6.2	6.1	5.8	5.6	5	4.4	3.4	2	1	0.1	0	0.5	1.7	1.3	1.7	1.9	2	3	5.2	7.4	9.6		10.3	9.5	7	4.6	1.6	-3	-6	-18	
Harman '18 (Or's -2 bass)	3.8	3.8	3.7	3.7	3.5	3.2	2.6	1.7	0.9	0.3	0	0	0.4	0.8	1			1.8	2.5	4.4	7	9.3		10.2	8.2	6.6	4.2	1.1	-2.5		-18.6	
Harman '18 w/o bass	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	1	1.4	1.7	1.8	2.5	4.4	7	9.3	10.4	10.2	8.2	6.6	4.2	1.1	-2.5	-6.7	-18.6	
(Headphones)																																
AKG K361 Or	1.6	2.2	2.5	2.8	1.8	-0.3	-0.4	0	0.2	0.5	-1.9	-3.3	-3.9	-3.6	-2.8	-2.1	-0.8	0	1.8	3.7	5.4	6.1	6.6	-0.4	0.2	1.5	-1.1	-3.7	-7.4	-11.1	-13.8	
AKG K371 Or	5.7	5.9	5.3	4.9	3.2	0.9	1	0.9	0.6	-0.3	-0.8	-1.8	-1.8	-1.8	-1.5	-1.1	-0.6	0	0.7	2.3	4.2	7.3	7.3	2	4.2	4.3	3	-3.3	-6.2	-15	-16.5	
AKG K550 IF	2.4	3	3.2	3	2.3			0.9	1.7	-0.8	-0.3	-0.6	-0.8	-1.2	-1	-2	-1.8	0	2.1	2.7	2.9	5.6	7.6	4	1.8	3.7	2.7	2.1	-4.9	-12.5	-5.3	
AKG K601 Or	-9	-7.5	-6	-5	-5	-5	-2.5	-2	-1	-1	-	-1	-1	-1	-1			0	2	6		13.5	11.5		5	6	7	-9	-7	-3	-10	
AKG K701 Rt	-6 1	-4	-4 2.8		-2.5	-2 4.2		-1.5	-1 3.0	-		-1 4.6	-1 4.6	-1 4.5	-1 4 1		-1.5	0	1.5	2 1	73	13	11.5	7.5	6.5	9.5	10	-1 -5.2	1	-10 -3.4	-7 -11 1	
AKG K712 Or AKG Q701 Rt	-5	-4	2.8	3.4 -2	3.9	4.2		4.3 -0.5	3.9	3.9	4.4	4.6	4.6		4.1 -0.5		1.8 -0.5	0	-2.1 1	2.1	7.3	8.2	6.6 9.5	ອ.1 7	10.3 6.5	8.7 10	6.8	-5.2 -3	1.8	-3.4 -11	-11.1 -7	
	-5.3	-4.6			-3.6	-		-2.2										0	-0.9	-2.2	-0.6	5.1	8.7	5.9	0.1	-3.2	-1.9	-5.7	-5.6		-12.9	
Audeze LCD-2 Class Rt	-5				-2.8			-3										0	0.8	0.2	2.2	4.5	1.7		-2.2	1.5	0.1	-13	-4.4	-7.9		
	-3.3	-2.8			-2.1											-0.4	0	0	-0.3	1.5	1.5	2.6		-0.6		2.8	-1.8	-2.2		-11.1	-5.1	
Audeze LCD-X IF	-4.7	-3.9	-0.3	0.1	0	-0.3	-0.3	-0.1	-0.3	-0.5	-0.2	-0.4	0	-0.3	0.1	-0.5	0	0	-0.7	1.3	3.5	5.3	6.2	4.7	4.5	0.9	-3.1	0.5	-3.1	-4	-4	
Audio-T M40x Rt	-0.3	1.2	2.7	3.8	4.3	4.2	3.2	3.7	4.3	2.9	1.1	-1.6	-3.8	-3.7	-3.2	-2.2	-1.4	0	2.2	3.8	5.3	7.2	8.3	6.1	3.4	0.9	7.7	4.6	-1.1	1.3	-9.1	
	-14.5		-8.1	-4.9	-2.1						2.5			-1.3	-1.4	-0.1	0.1	0	2.1	3.8	5.6	8.3	9.6	9.4	6.7	6.5	8.8	2.3	-2.6	-5.8	-8	
	-7.8	-4.9	-2	0					0.6				-3.5			-0.2	-0.1	0	1.2	2.7		10.6	11.2	10.7	7.1	3.6	8.6	-0.3	3.2	3.7	-9.2	
Audio-T M50x Cr	3.8	5.1	5.4	_	5.7				2.5		-0.7						0.8	0	0	1.5		10.5	9.8	7.8	3.1	3.8	3.6	-0.5	-3.2		-11.2	
AudioQ Nighthawk IF	8.4	8.3	8.2	8		7.4	_				8.3						1.8	0	1.6	5.2	5.8	5.6	8.4	5	2.1	3.9	4.6	5	-1.9	-6	-0.6	
Beats Solo HD IF Beats Solo3 Wireless Rt	10	10	7.4	6.5 9.5	4.7 9.5	0.5 9.5	9	9	5.5 8.5	8	1.9	5	2	-3.7 1	-3.9		-0.8	0	0.3	4.5	7	1.5	5.1	4.8	υ. ɔ	-10.5 6	7	-8.5 2	-15.5 -3	-19.5 -8	-19.5 -13	
	-9.2	-7.3			-5.3		-7			-	3.2			-		-0.5		0	1.5	3.7	7.3	8.3	6	2.3	2.5	4	5.9	-2.3	1.7		-20.6	
bey DT 770/250 Or	5.8	6.5	7	7.2	7	6.2		-2.7			-6.4					-2.3		0	-0.8	1.2	3.9	6.6	3.4	6.1	6.1	9.2	5	-0.9	4.3		-10.8	
-	-5.3	-4.1	-2.6	-2	-1.2	-0.5	-0.7	0.3	0.4	0.6		0.8		0.4	0.5	0	0.2	0	0	1.1	3.2	5.6	9.6	6.8	2.8	4.7	4.1	3.9	-4.8	-13.8	-3.4	
bey DT 990/250 Or	-2.8	-1.4	0	1.3	2.3	2.9	3.1	2.5	2.6	2	1.3	0.2	-0.9	-1.9	-1.7	-2.1	-1.9	0	1.6	2.8	5.2	8.8	10.7	10.5	10.1	10.8	11.5	4.2	7.1	2.4	-3.1	
bey DT 1770 L pads Rt	5.7	6.1	5.8	5.1	4.2	5.3	7.1	7.6	7.8	6	1.3	-2.7	-1.4	-0.4	-0.1	-0.4	-0.3	0	0.2	-0.1	-0.1	2.1	2.7	0.5	1.1	5.9	5.6	0.1	-4.5	-18.6	-26.4	
bey DT 1990 A pads Or	-2.2	-1.6	-1	-0.5	0	0.3	0.5	0.6	8.0	1.2	1.2	1.3	1.1	8.0	0.5	0.2	-0.1	0	1.3	3.3	5.1	8	7.8	4.1	6.9	5.9	12.7	1	1.7	1.8	-13.5	
Creative Aur Live 2 IF	4.7	5.4	5.8	6	6	5.7	4.8	4.9	4.4	3.8	3.6	2.9	1.7	-0.7	-0.3	0.2	8.0	0	-1.2	-2.8	-2.4	0.3	1.9	2.7	-1.4	-3	-2.3	2.1	-12.1	-8.5	-9.2	
	0.9	1	1.2				0.6		-1.3					-0.7		0.9		0	1.4	2.3	2.4	4.3	6.7	6.3	1.7	2.3	3.7	-2.5	-2.8	-14	-9	
DCA Aeon Cl v2 Or	5.1	5.4	5.6	5.4		4.6			4.7			1.2					0.6	0	1.4	0.7	1.7	3.3	4.2	3.1	5.6	7.1	4.4	-8.6	-0.4	-0.1	-2.9	
Focal Clear Or Focal Elear Or	-4 -2.5		-2.7 -1.1								-2.3					-2.3 -1		0	0.9	2.8	3.2 1.9	5.1 4.1	7.4	2.5 -0.4	1.9	0.9	-4.4 -6.9	-10.2 -8.9	-2 -9.7	-5.6	-13.4	
	-7.5	-6.2			-0.4											-1.5		0	1.3	3.1	4.8	7.2		-2.4	-1.0	0.3	2.7	-6.4	-4.2	-6.9	-13.3	
	-0.1		-0.1					1.5										0	0.5	3.1	2.7	5.5		-6.8		0.1	0.1	-8.9	-2.9	-10.6		
Focal-Drop Elex Or	-3	-2.1			-1.2													0	1.9	2.5	1.8	3.8	6.8	5.5	4.6	1.7	-5.9	-6.5	-7.3	-8.2	-5.1	
Focal Utopia Or	-5.5	-4.9	-4.4	-3.9	-3.5	-3.2	-2.9	-2.7	-2.7	-2.6	-2.7	-2.8	-2.9	-3	-2.9	-2.4	-1.4	0	1.6	1	0.2	5.8	6.2	5.9	4.1	3.4	-2.6	-5.3	-7.9	-5.2	-5.7	
Fostex Purpleheart Or	-2.1	0.3	2	2.8	2.9	2.3	2	1.6	1.2	0.7	0.1	-0.4	-0.7	-0.1	-2.1	-3.3	-2.4	0	1.2	3.3	5.6	8.1	0	0.1	6.5	4.5	3	-1.8	-1	-11.1	-9.9	
Hifiman-Drop HE4XX Or -	-11.4	-8.7	-6.6	-4.2	-2.6	-1.4	-0.8	-1	-1.5	-1.6	-1.9	-2	-2.2	-1.9	-2.5	-2.6	-1.3	0	0.3	-1.4	-0.5	7.6	10.8	7.3	1.9	6.1	7.1	-4.2	-10.1	1.8	-11.1	
HiFiman-Drop HE4XX IF	-2.4	-1.3	-0.4	-0.2	-0.1	0.6	0.5	0.3	0.1	-0.1	0.1	-0.2	0.1	0.3	-0.1	0.4	-0.1	0	-0.5	-0.4	0.9	6.4	11.4	7.9	5.1	5.6	4.2	2.8	-2.7	-10.7	-5	
	-9.7	-7.7	-5.3	-3.2	-1.6	-0.5	-0.2	-0.3	-0.6	-1.2	-1.7	-2	-1.7	-1.8	-1.5	-1.1	-0.6	0	1.1	3.9	12	13.7	11.4	6.3	7.4	5.8	9	10.5	3.8	-11	-22.9	
	-12	-9.7			-2.2						-1.6							0	0.9		15.4		10.2		8.9	6.5	5.5	-2	-4.8		-14.9	
	-3.3	-2.6	-2.1				-1.3											0	-0.7	-0.9	0.3	4.8	11.4	8.9	7.1	-0.2	0.1	-6.3		-10.7		
	-3.3 -4.4	-2.3 -3.1	-1.9 -1.8		-1.6 -0.6													0	-0.9 0.5	-1.2 1.1	-0.3 2.2	5.6 6.1	10.4	10.2 8.5	8.1	3.9	2.5 6.7	-5 -1.8	0.3	-3.5 -4.7	-17.2 -9.8	
	-3.5	-2.8			-0.9						-1.1							0	-1.4	-1.7	1.9	8	9.6	6.2	3.3	3.8	6.4	-7.9	-1.2	-4.4	-2.1	
	-0.8	-0.8			-0.8									-0.9		-0.5		0	0.1	-1.3	1.3	7.3	8.8	4.3	10	7.7	5.5	-3.1		-11.5		
	-6.9	-4.7				3.4			4.5							-0.2		0	1.4	4.2	7.2	9.3		-0.7		-1.5	0.6	0		-15.3		
Koss KSC75 Rt -	-15.5	-12.9	-9.9	-7	-4.4	-1.8	0.3	1.3	1.7	1.3	0.5	0	-0.3	-0.7	-0.8	-0.7	-0.5	0	1.1	3.9	8.1	12.1	12	2.4	11.1	1.8	5.7	1.5	-3.8	-7.1	-9.5	
Meze 99 Classics Or	9.7	10.4	10.9	11.2	11.3	11.2	10.5	9.3	9.4	9.6	9.3	7.5	2.6	-0.2	1.7	2.8	2.1	0	2	5.7	8	8.3	7.3	2.7	13.9	11	8.2	-6	6.8	-4.3	-14.1	
Meze Empyrean Or	2.8	2.8	3		3		3.1	3.2			3			2.1		1.2		0		-1.3		3.8	7.1	8.4	6.2	3.4	0.5	-5.7	-4.7		-10.5	
	-1.8				-0.4			-0.1			0.1						1.1	0	1.8	4.1	7.3	9.2	10.2	8.1	4.3	2	-5.7	-1.4	-4.9	-1.5	-1.5	
Neumann NDH 20 Or	8.4	8.9	9.3				5.9				3.1						1	0	-1.4		73	3.1		73		5	7.5	-3.9	-6.2 -4.5	-8.4 -12.5	-7.4 -13.1	
Oppo PM-3 Rt Oppo PM-3 Or	1.1	0.8	1.8	1.2	0.9	0.6			2.7	2.3		0.1				-0.7	-0.4	0	2.7	4.9	7.3 7.5	11.5	11.3	7.3 8.2	4.2 5.7	4.3 9.2	5.4	4.5 -11.8		-12.5 -10.8		
	-9.9	-8.1			-1.1													n	0.8	1.5	2.2	4.7	8.3		10.8	12.4	-0.9	-0.2	1.6		-17.5	
Philips Fid. X2HR Or	-5	-3.1	-1								-1.1			-0.9				0	-1	3.8	2.5	5.4	5.9		10.8	5.8	-0.3	-3.5		-11.7		
•	-6.7	-6	•	-4.2	_		-3.2							-2		-1.7	0.0	0	-0.5	-6.3	-2.5	3.5		-0.3		-1.2	-6.1	-3.8	-4.5	-5.5	-12	
Senn-Drop HD 58X Or	-7		-3.9						0.2		-0.2						-0.6	0	1.2	1.5	1.9	3.3	6.6		7.4	1.1	-1.2	-7.2		-11.4	-9.1	
Senn HD 579 RAA	-5.1	-3	-0.9	1.2	2.2	3.3	4.1	4.9	5.1	5.1	4.8	4.4	3.8	3.2	2.5	1.5	0.6	0	-1	-1.7	-0.2	1.7	5	7.1	9.7	10.8	1.1	-1.4	3.5	-6.9	-4.6	
Senn HD 599 Or	-7.5	-5.7	-3.9	-2.3	-1.4	-0.4	0.5	1.5	1.9	2	1.8	1.2	0.9	0.6	0.2	-0.2	-0.2	0	0.4	1.2	4.6	8.3	10.8	8.2	4.7	2.2	2.9	0	-7.7	-14.5	-9.6	
Senn HD 579 DC est				-1.3	-0.6	-1.6	-3.5	-2.5	-2	-1	0.8	0.2	-0.3	-0.6	0.2	-1.2	-0.7	-1	-1.4	-2.2	1.6	7.3	8.8									
	-3.7	-2.5	-1.1	-0.1	8.0	1.7	2.2	2.7	3		2.3		1.2	0.5	0.2	0	-0.2	0	0	-0.7	2.9	6.7	10.4	7.7	5.4	2.9	2.3	-3.4		-11.6	-7.7	
	-10	-7.7	-5.3		-1.5				1.6		1.2	0.9		0				0	1.6	2.5	3.9	7	11.4	8.4	4.5	-1.6	-1.5	-0.5	-9	-10.5	-6	
	-6.7		-3.3															0	1.4	2.7	5.2	7.8	10.6	6.4	6.3	4.8	2.7	-4.1	0	-5	-13	
	-11.5		-7.5							-1	-1.5						-1	0	1	3.5	5.5	9.5	10.5	4.5	2.5	2.5	0	-2.5	-3.5		-11.5	
	-6.7 -9.3	-5.3 -7.5			-2.3				0.8	1	0.8	0.5		0.2			0.5	0	1.3	2.1	3.8	6.7	9.1	5.7	5.3	2.7	0.9	-7.6 -3.2	-7.2 -4.8		-12.8 -8	
	-9.3 -3.6	-7.5 -2.6	-6 -1.8	-4.4			-1.3 -0.4			0.9		0.5				-0.2	0	0	1.7 -0.4	2.7	3.7	6.3 4.9	10.1	7.5	2.7	-2.6 10.2	-5 5.8	-3.2 -1.5	-4.8 -0.2	-10.9 -7.2	-8 -9.1	
	-3.6 -4.1	-3.3	-1.8 -2.6		-1 -1.8		-0.4							-0.2			0.3	0	-0.4	-0.3 0.1	1.8 2.9	6.1	6.9	7.8	10.2	10.2	5.8 4.2	-1.5 -3	-0.2 1.4		-9.1 -11.6	
Senn HE1 Orpheus 2 Or	1.1		-2.0	1		0.9	1				-1.8					-0.1	-1	0	-0.5	-0.8	3.4	5.6	6.7	3.9	2.9	4.7	2	2.7	-4.5		-10.2	
	-0.2	1.4	3.4	4.8	5.5		3.8		3.8				1.3			0.6	0	0	0.7	3.2		11.1			13.2	12.8	5.7	2.4		-13.3		
-																	-0.1	0	-2	-1.8	1.4	4.6	3.5	-8	-3	-3				-16.7		
Sony MDR-7506 Or	-3.3	-2.5	-2	-0.6	-1.7	-0.7	-0.7	-0.8	-0.8	-0.9	-0.8	-0.6	-0.3	-0.2	-0.5	-0.8	-0.1	•	-				0.0	- 1	O	-5	-1.9	-2	-9	-10.7	-21	