Measurement Protocol

Measurement Object	WIFI 5.5G_802.11a 6M_EVS WB 24.4kbps_CH132
Description	HMD_TA_1600#Tomcat

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/22 12:27
Responsible Person	audio

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5.1b Receive Volume Control Performance 2N WB, Index: 1 4
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5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 6
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 8
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 9
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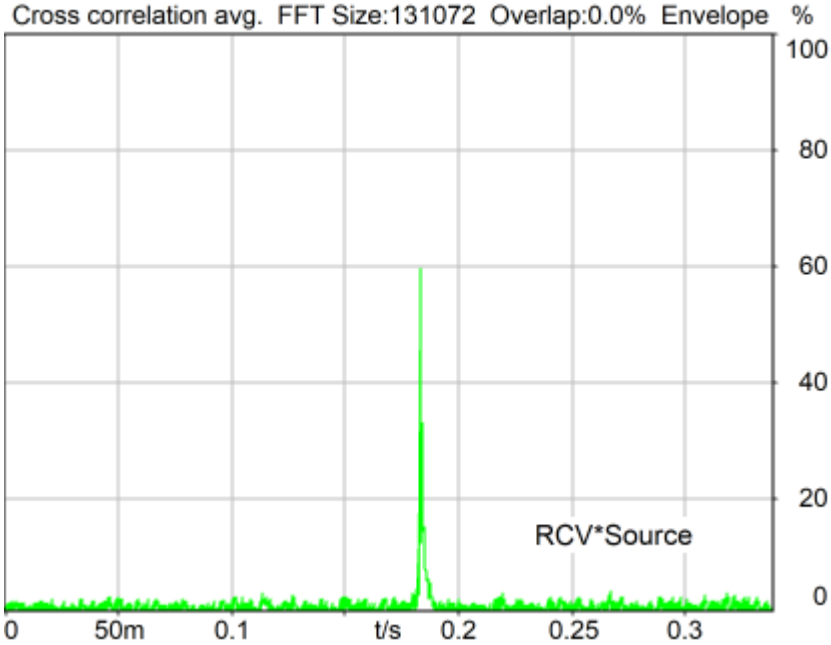
Overall Receive Delay WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement

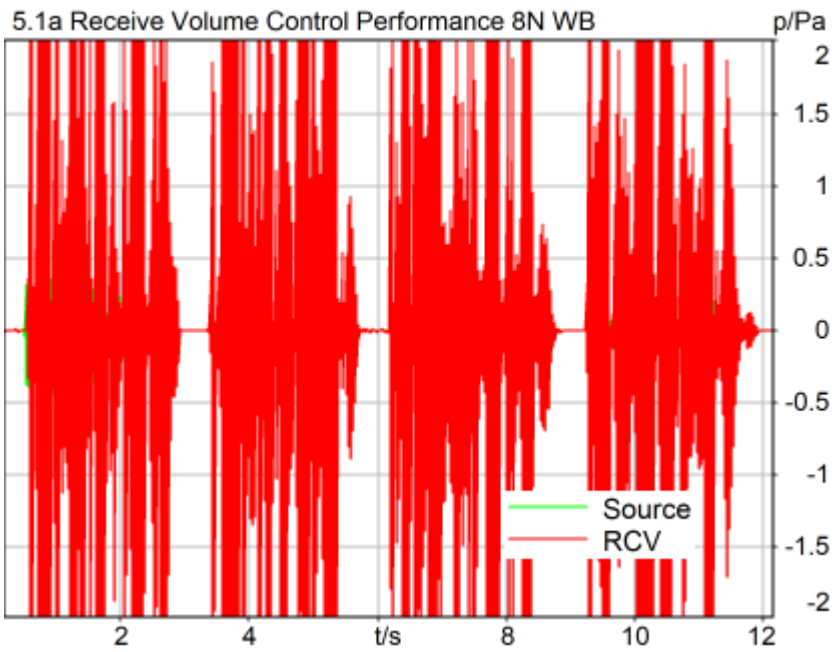


Channel	Delay
RCV*Source	183.7 ms

2024/5/16 16:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.1a Receive Volume Control Performance 8N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

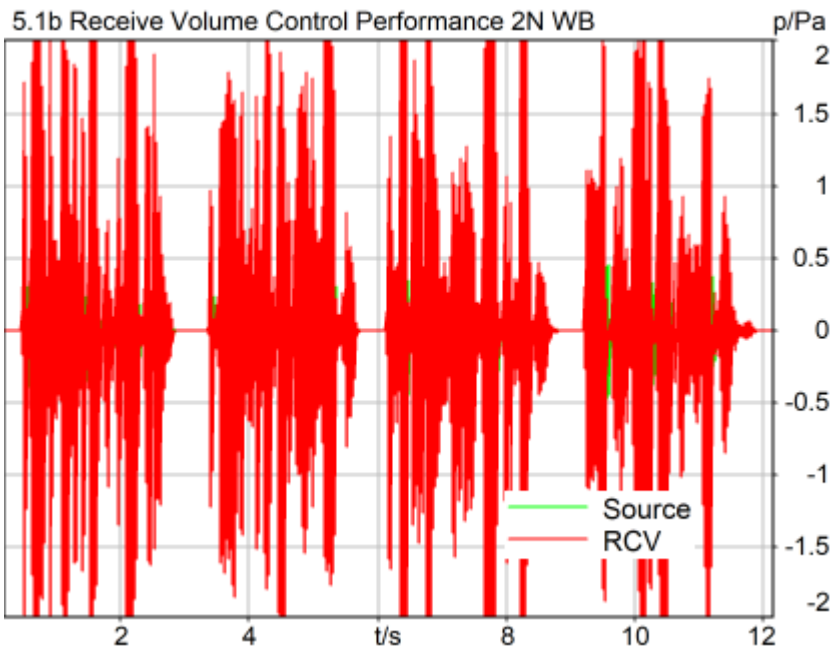
Channel	Speech level	Activity	Corrected speech level	
RCV	91.74 dB[SPL]	84.38%	21.74 dB[SPL]	Ok

Ok

2024/5/16 16:03 ACQUA 6.0.200

5.1b Receive Volume Control Performance 2N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

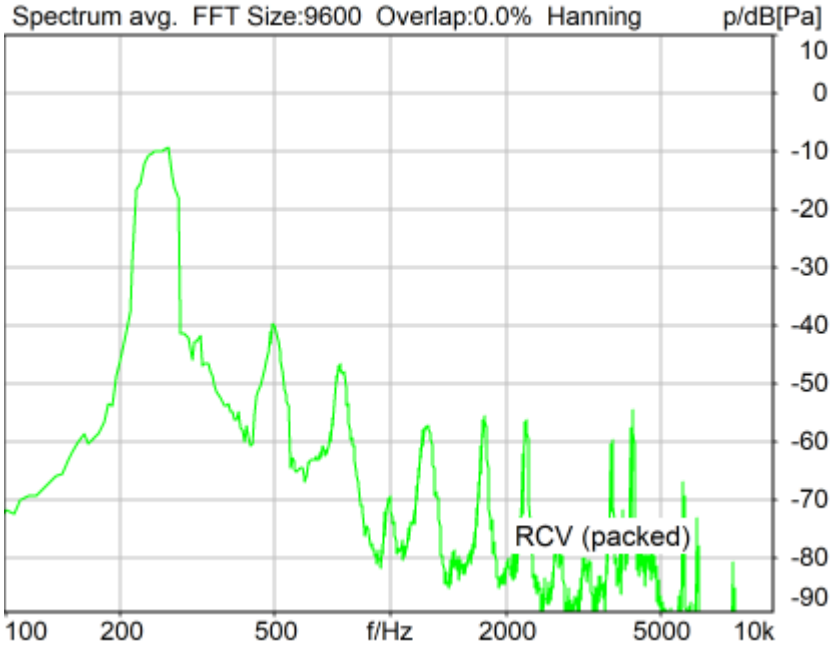
Channel	Speech level	Activity	Corrected speech level	
RCV	85.90 dB[SPL]	84.32%	15.90 dB[SPL]	Ok

Ok

2024/5/16 16:11 ACQUA 6.0.200

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



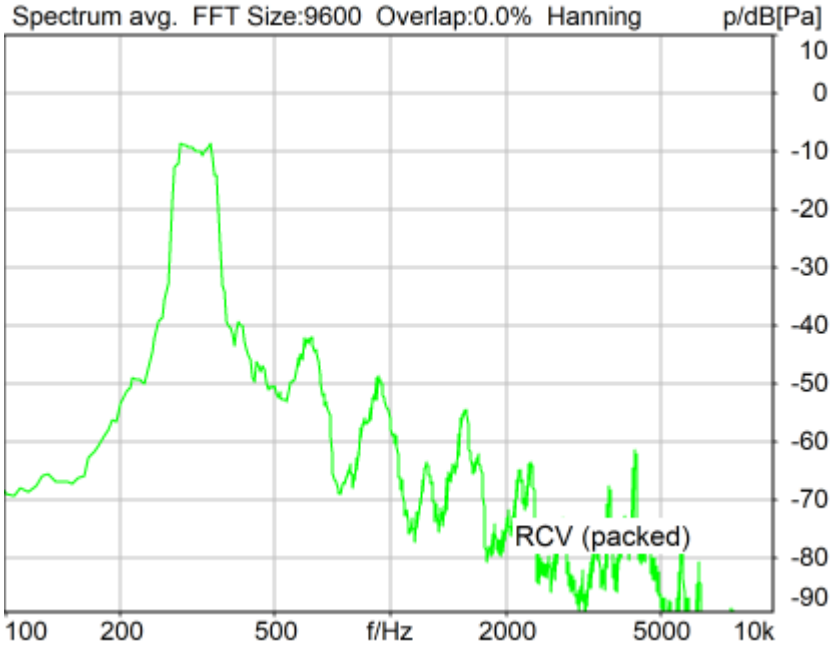
Distortion (Noise) RCV (packed): 31.21 dB (2.75%) Ok

Ok

2024/5/16 16:03 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



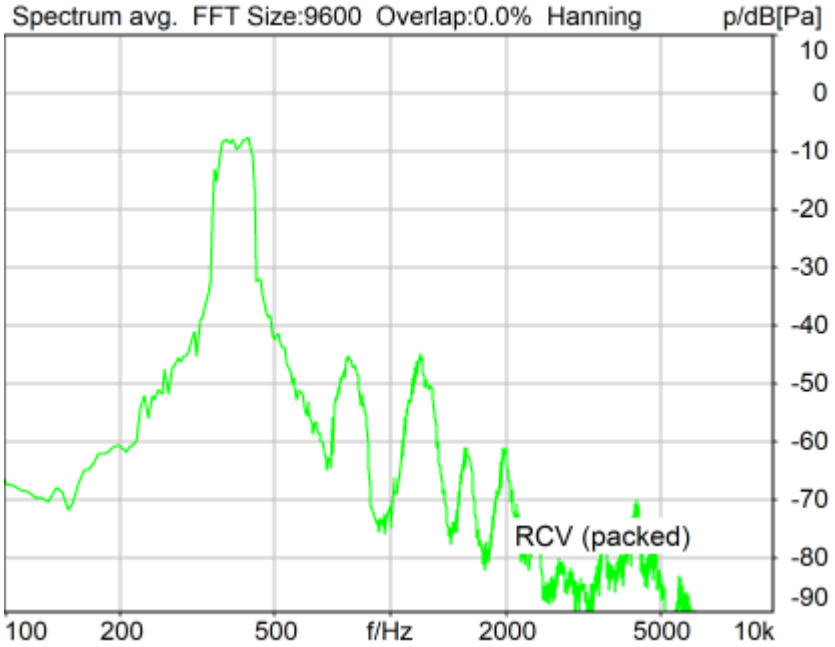
Distortion (Noise) RCV (packed): 31.85 dB (2.55%) Ok

Ok

2024/5/16 16:04 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



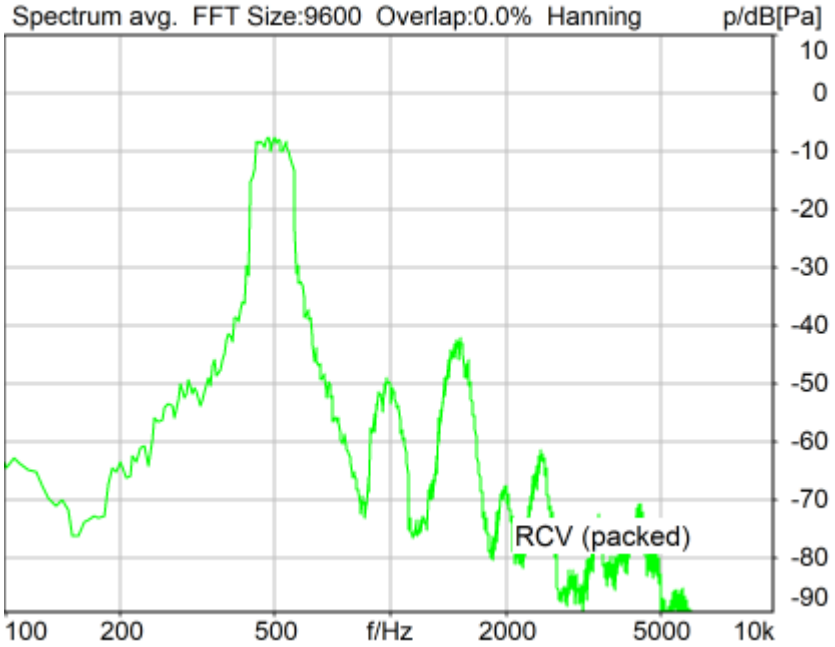
Distortion (Noise) RCV (packed): 32.15 dB (2.47%) Ok

Ok

2024/5/16 16:04 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



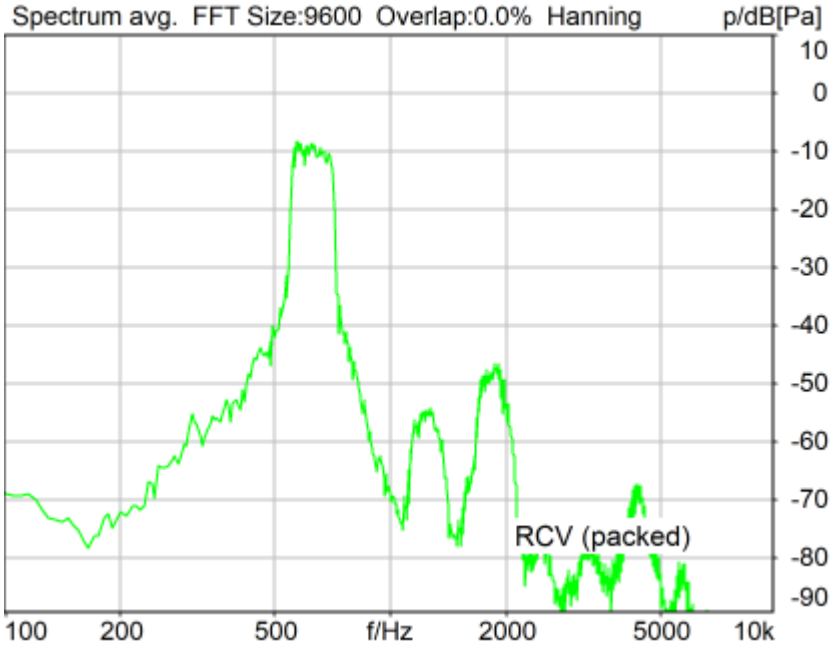
Distortion (Noise) RCV (packed): 30.34 dB (3.04%) Ok

Ok

2024/5/16 16:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



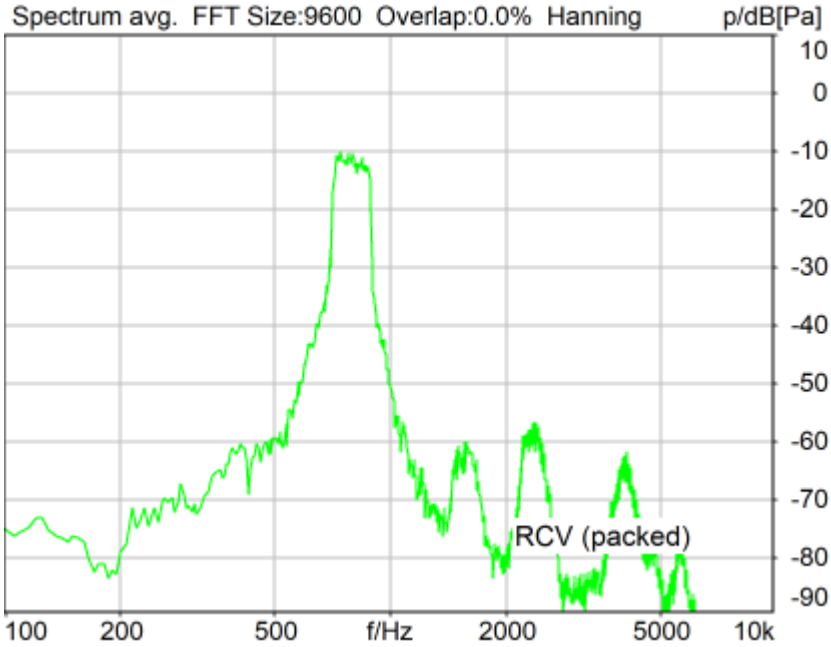
Distortion (Noise) RCV (packed): 31.73 dB (2.59%) Ok

Ok

2024/5/16 16:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



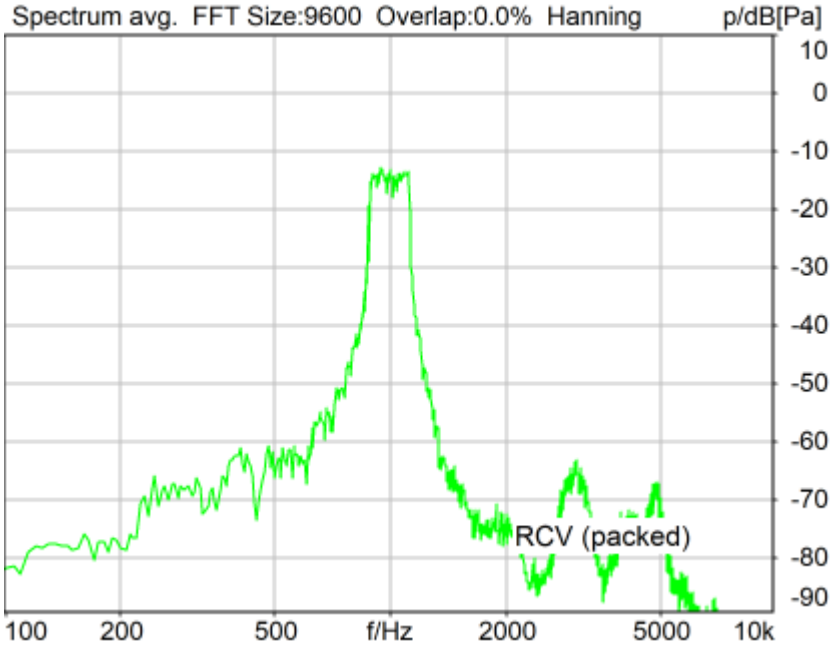
Distortion (Noise) RCV (packed): 31.55 dB (2.65%) Ok

Ok

2024/5/16 16:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



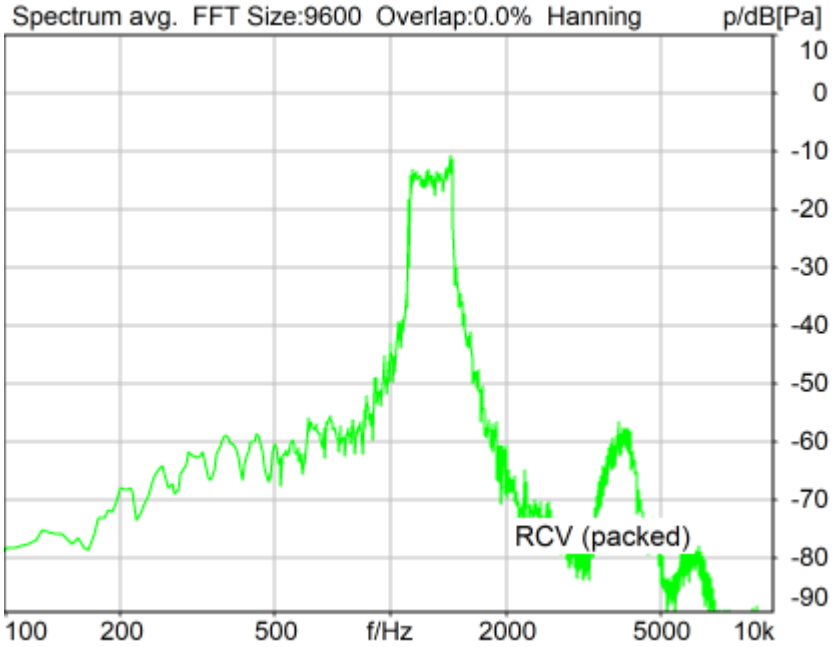
Distortion (Noise) RCV (packed): 29.65 dB (3.29%) Ok

Ok

2024/5/16 16:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



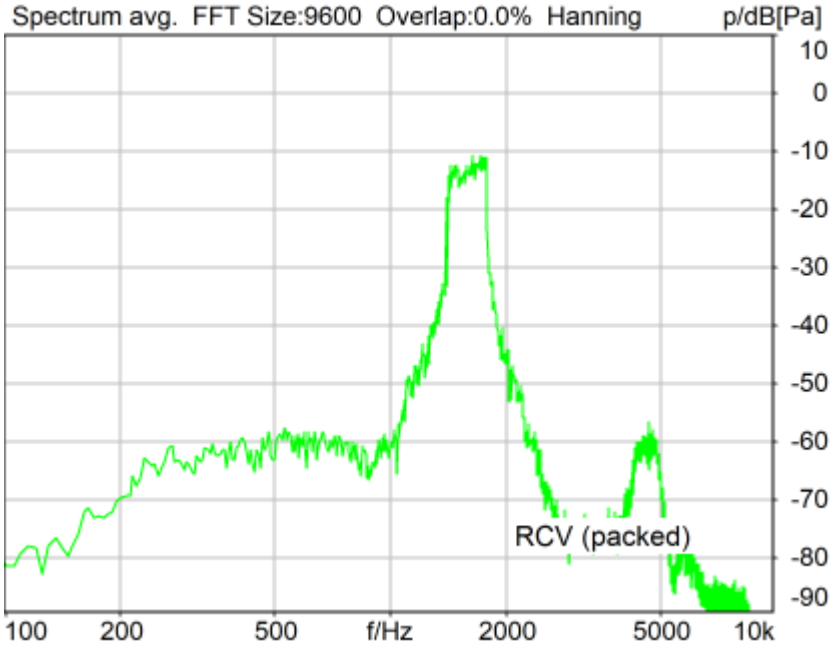
Distortion (Noise) RCV (packed): 21.46 dB (8.46%) Ok

Ok

2024/5/16 16:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



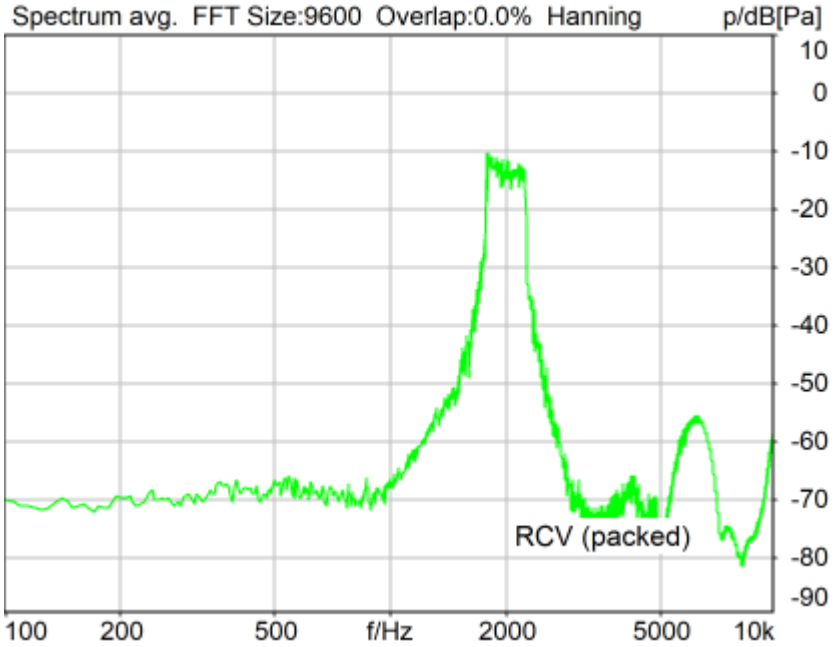
Distortion (Noise) RCV (packed): 24.48 dB (5.97%) Ok

Ok

2024/5/16 16:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



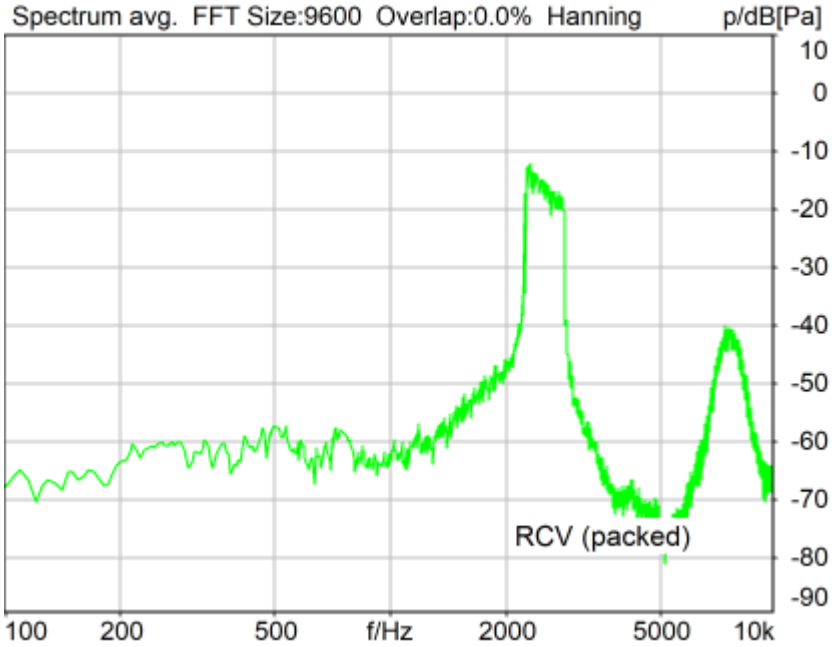
Distortion (Noise) RCV (packed): 23.18 dB (6.94%) Ok

Ok

2024/5/16 16:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



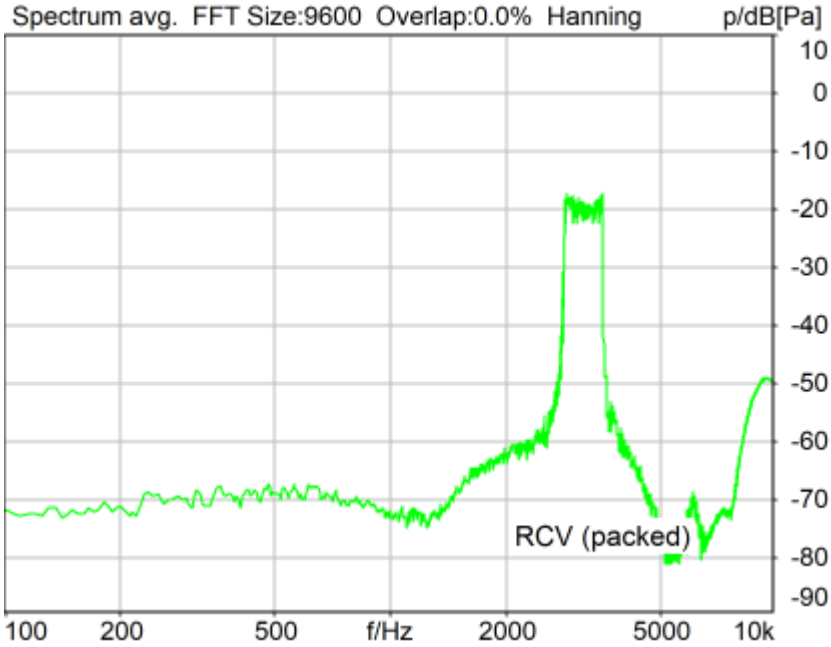
Distortion (Noise) RCV (packed): 22.38 dB (7.60%) Ok

Ok

2024/5/16 16:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



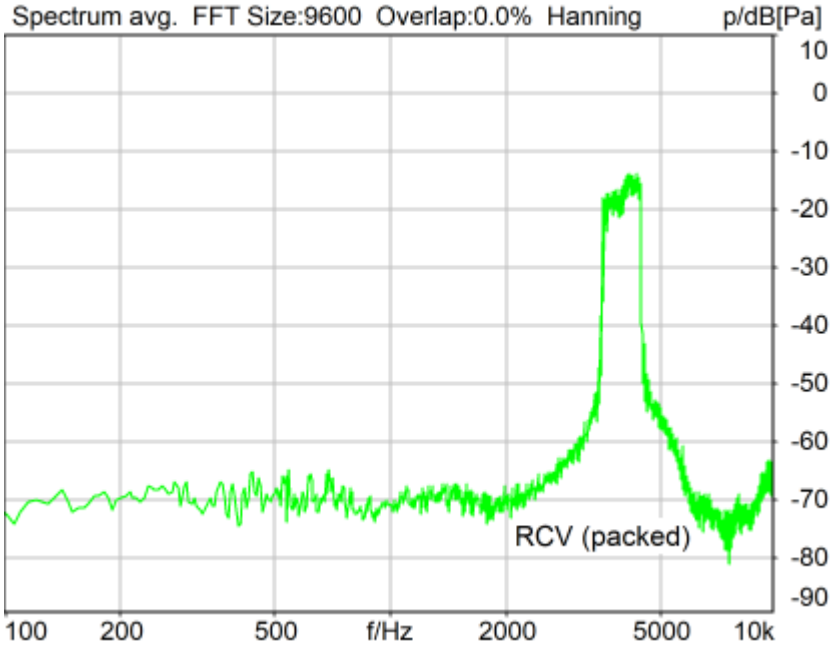
Distortion (Noise) RCV (packed): 26.46 dB (4.75%) Ok

Ok

2024/5/16 16:08 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



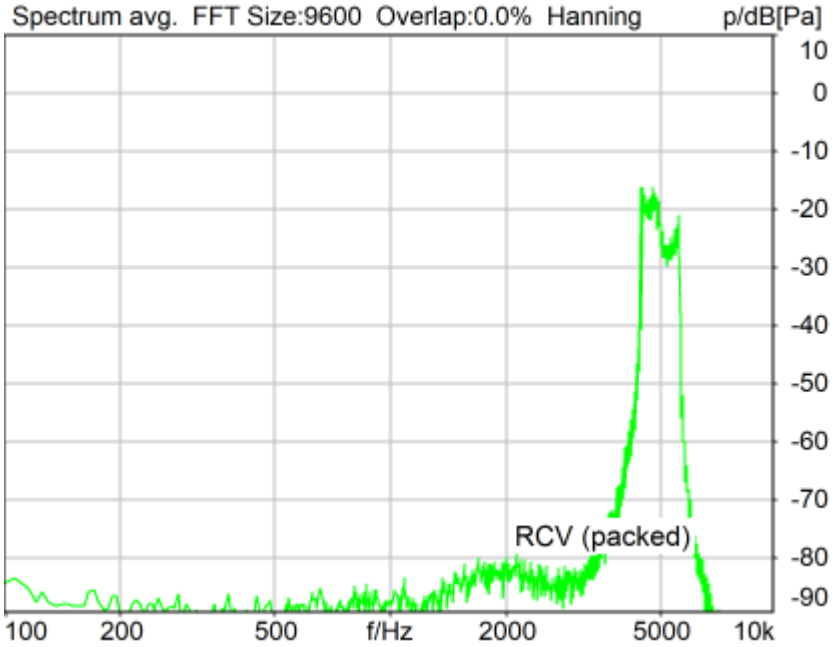
Distortion (Noise) RCV (packed): 28.37 dB (3.81%) Ok

Ok

2024/5/16 16:08 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 34.25 dB (1.94%) Ok

Ok

2024/5/16 16:09 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N

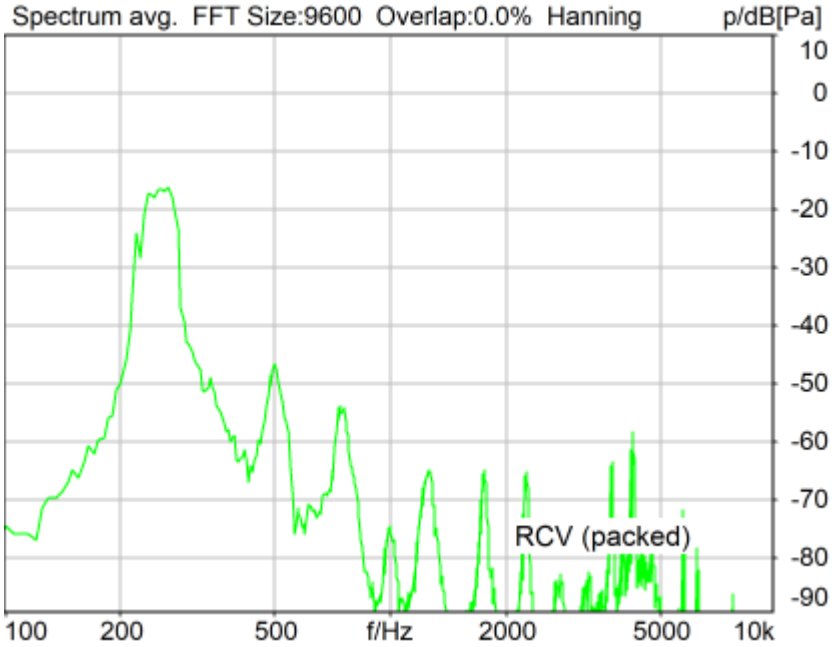
Region	Frequency	SDNR
1	250Hz	31.21 dB
2	315Hz	31.85 dB
3	400Hz	32.15 dB
4	500Hz	30.34 dB
5	630Hz	31.73 dB
6	800Hz	31.55 dB
7	1000Hz	29.65 dB
8	1250Hz	21.46 dB
9	1600Hz	24.48 dB
10	2000Hz	23.18 dB
11	2500Hz	22.38 dB
12	3150Hz	26.46 dB
13	4000Hz	28.37 dB
14	5000Hz	34.25 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.46dB at 1250Hz.

2024/5/16 16:09 ACQUA

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



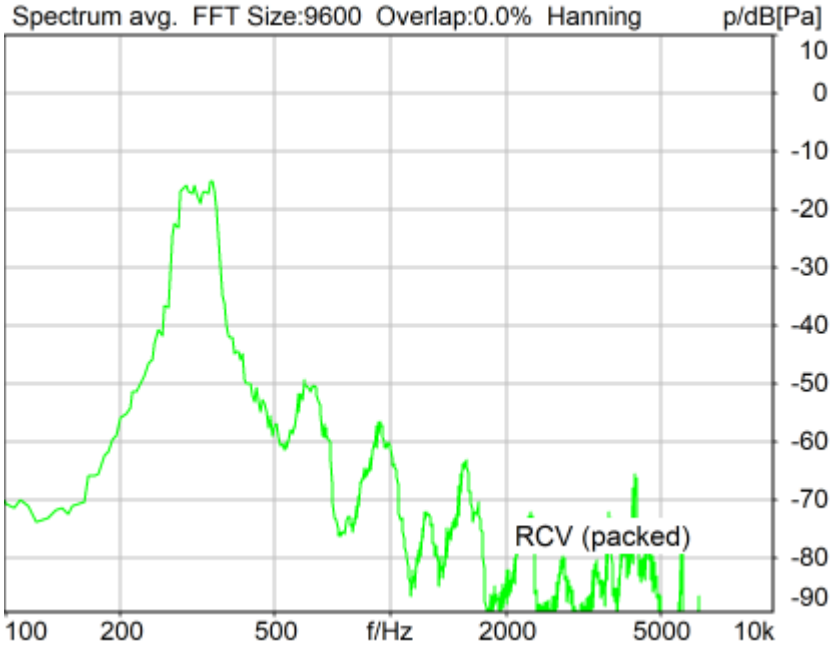
Distortion (Noise) RCV (packed): 30.85 dB (2.87%) Ok

Ok

2024/5/16 16:11 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



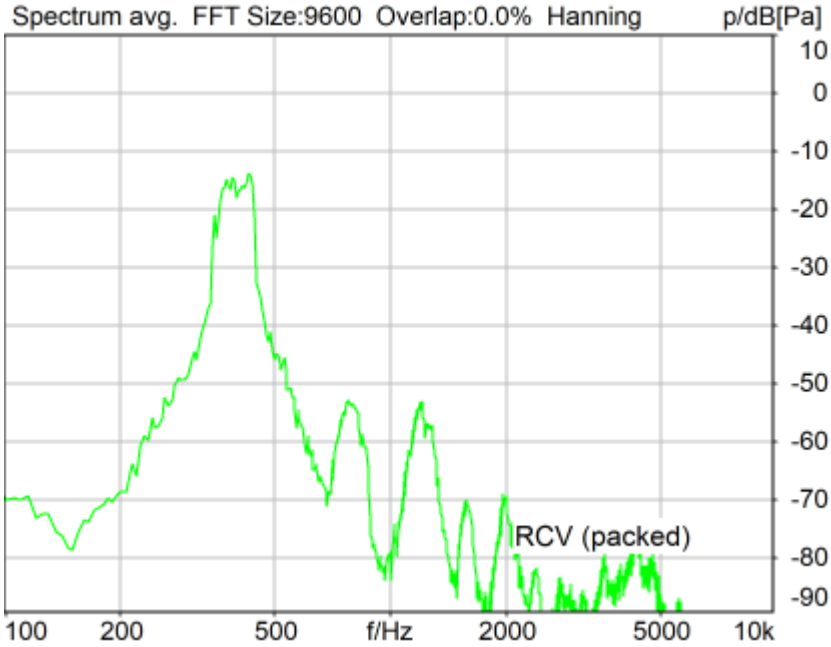
Distortion (Noise) RCV (packed): 31.25 dB (2.74%) Ok

Ok

2024/5/16 16:12 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



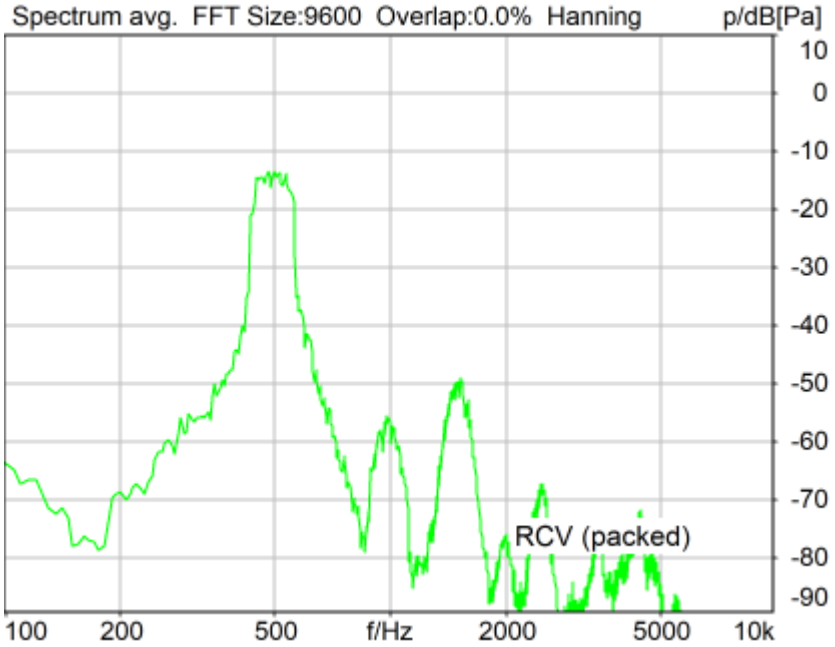
Distortion (Noise) RCV (packed): 30.59 dB (2.95%) Ok

Ok

2024/5/16 16:12 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



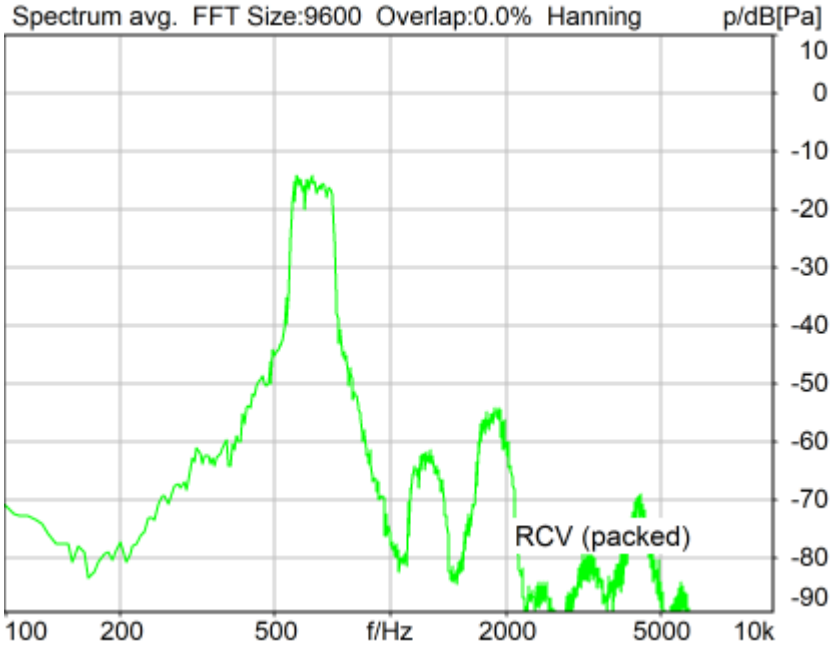
Distortion (Noise) RCV (packed): 30.17 dB (3.10%) Ok

Ok

2024/5/16 16:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



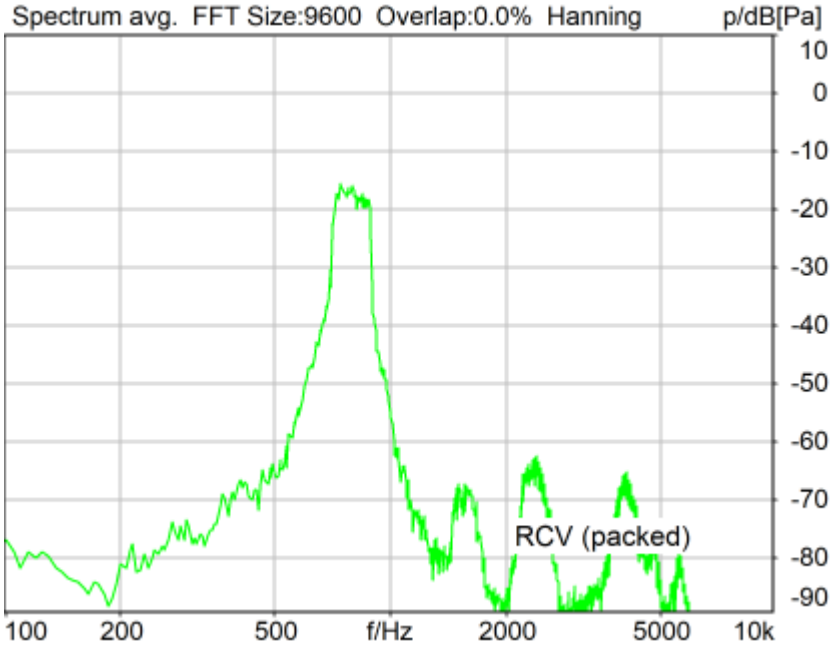
Distortion (Noise) RCV (packed): 31.35 dB (2.71%) Ok

Ok

2024/5/16 16:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



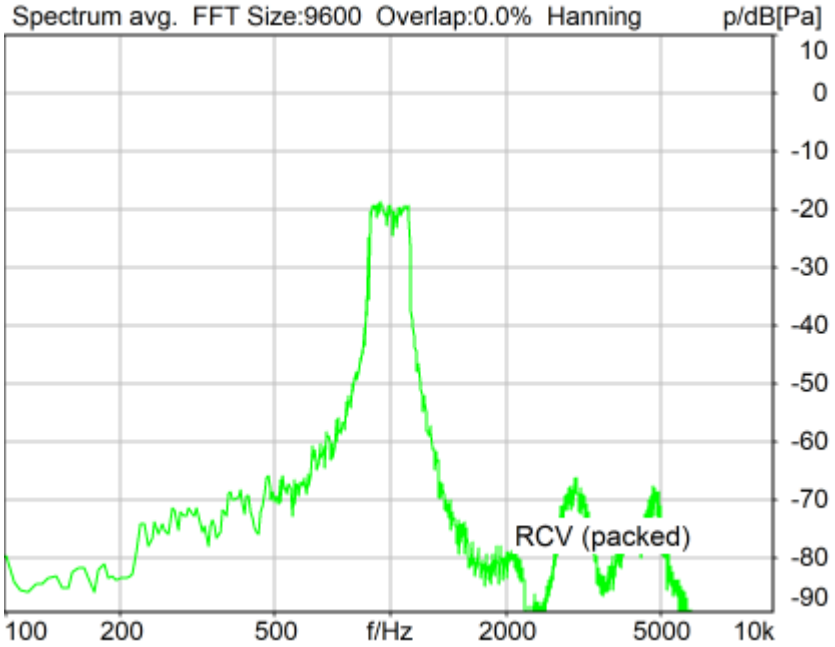
Distortion (Noise) RCV (packed): 29.67 dB (3.28%) Ok

Ok

2024/5/16 16:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



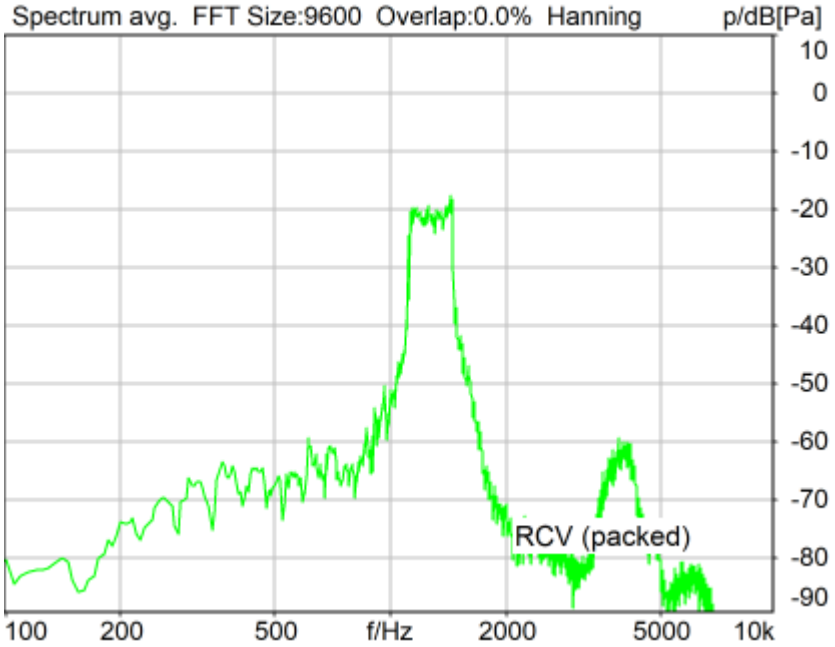
Distortion (Noise) RCV (packed): 29.82 dB (3.23%) Ok

Ok

2024/5/16 16:14 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



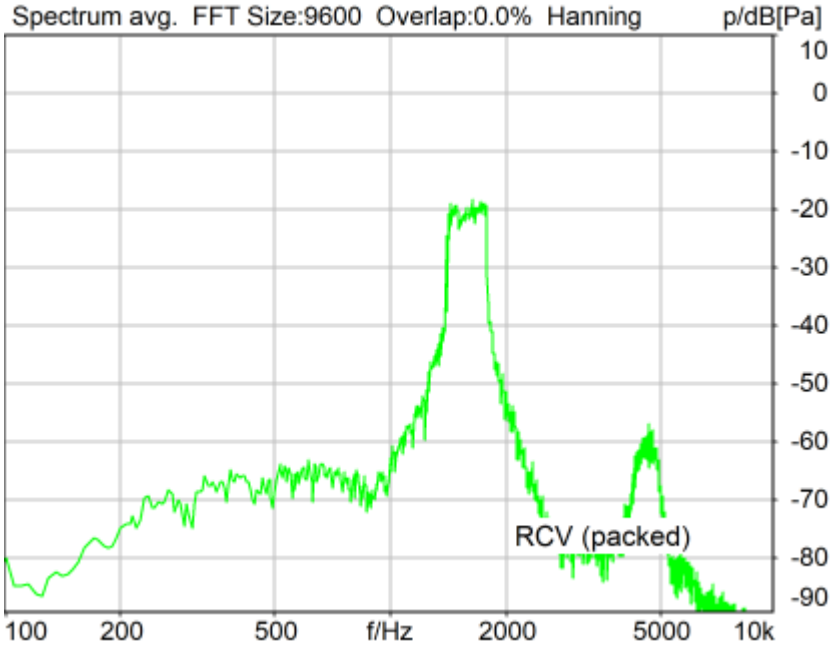
Distortion (Noise) RCV (packed): 21.85 dB (8.08%) Ok

Ok

2024/5/16 16:14 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



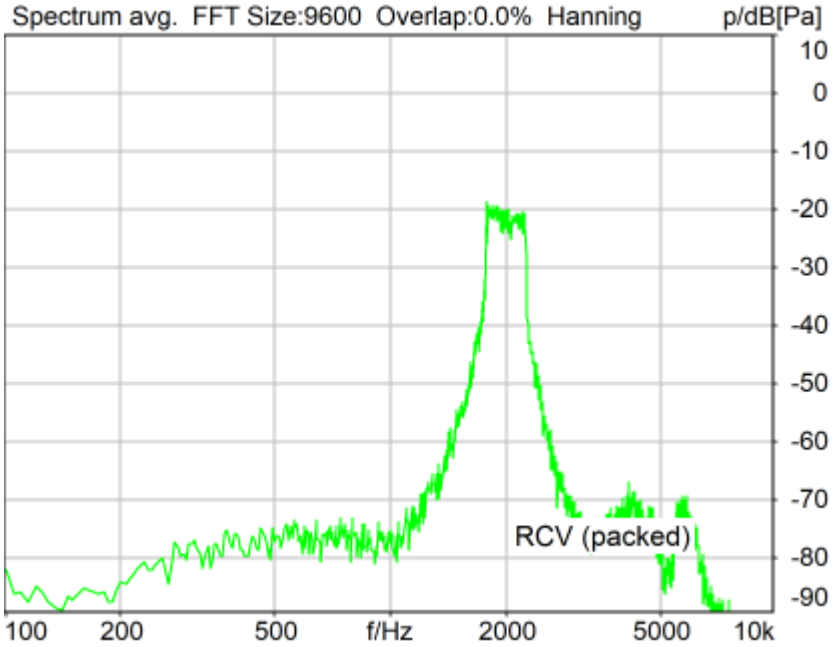
Distortion (Noise) RCV (packed): 24.60 dB (5.89%) Ok

Ok

2024/5/16 16:15 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



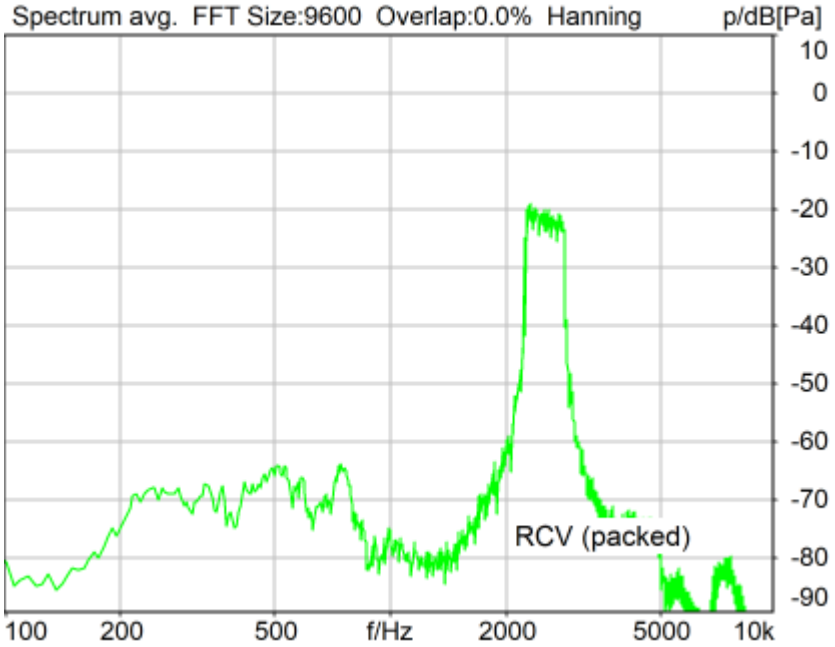
Distortion (Noise) RCV (packed): 23.37 dB (6.79%) Ok

Ok

2024/5/16 16:15 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



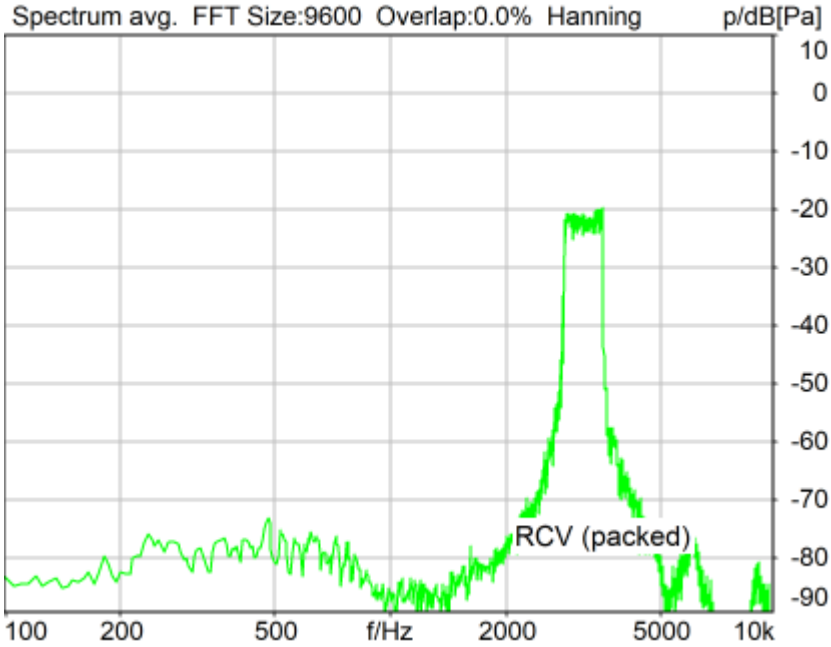
Distortion (Noise) RCV (packed): 29.76 dB (3.25%) Ok

Ok

2024/5/16 16:16 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



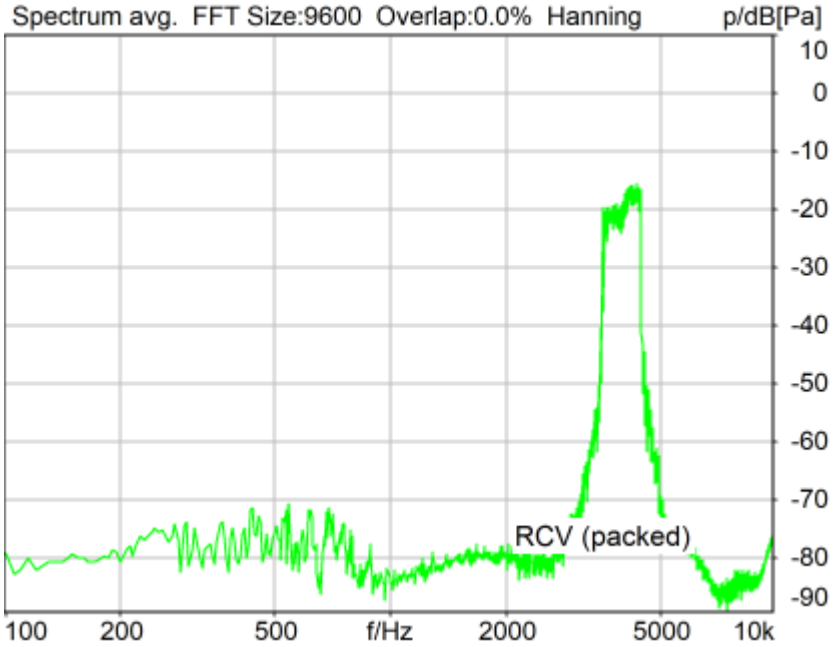
Distortion (Noise) RCV (packed): 33.15 dB (2.20%) Ok

Ok

2024/5/16 16:16 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



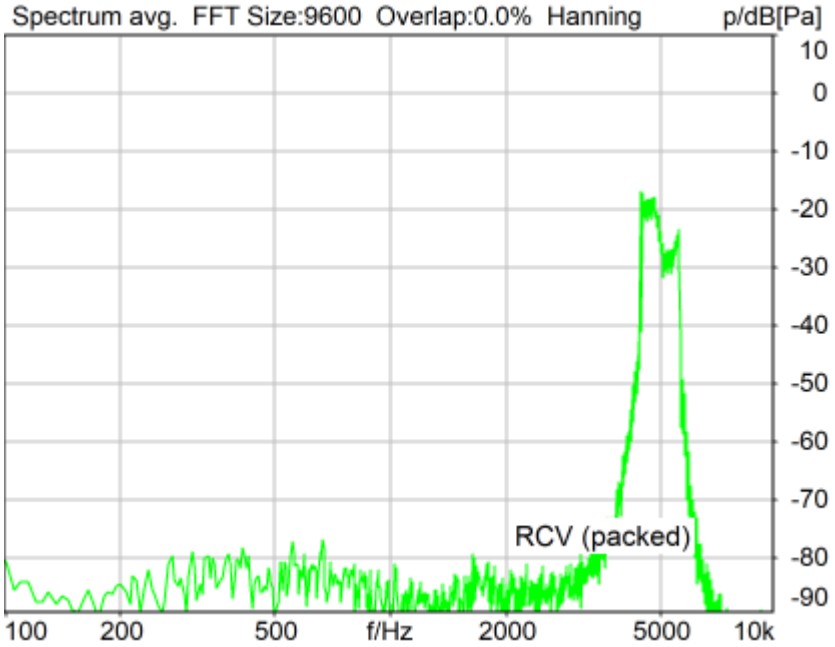
Distortion (Noise) RCV (packed): 34.97 dB (1.79%) Ok

Ok

2024/5/16 16:16 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



Distortion (Noise) RCV (packed): 31.94 dB (2.53%) Ok

Ok

2024/5/16 16:17 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N

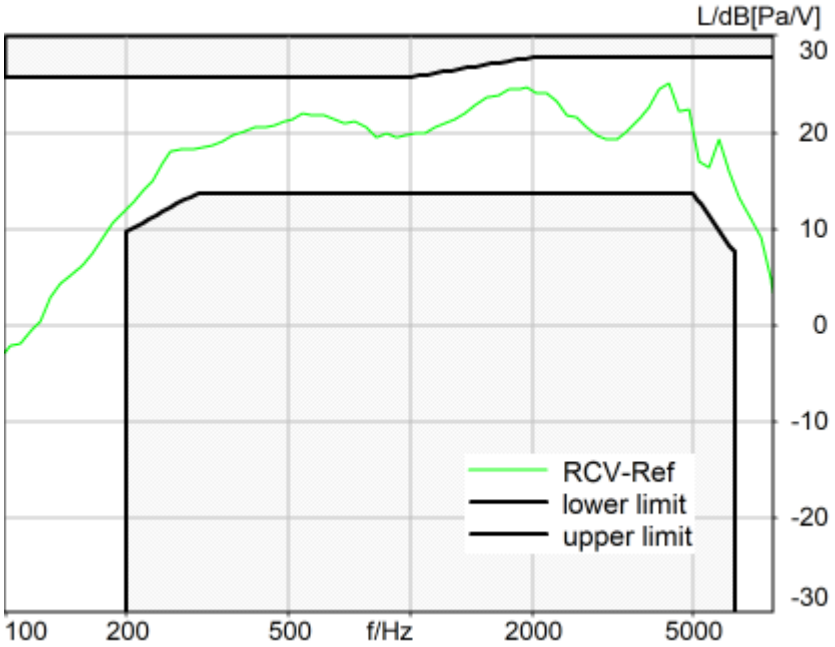
Region	Frequency	SDNR
1	250Hz	30.85 dB
2	315Hz	31.25 dB
3	400Hz	30.59 dB
4	500Hz	30.17 dB
5	630Hz	31.35 dB
6	800Hz	29.67 dB
7	1000Hz	29.82 dB
8	1250Hz	21.85 dB
9	1600Hz	24.60 dB
10	2000Hz	23.37 dB
11	2500Hz	29.76 dB
12	3150Hz	33.15 dB
13	4000Hz	34.97 dB
14	5000Hz	31.94 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.85dB at 1250Hz.

2024/5/16 16:17 ACQUA

5.3 Frequency Response 8N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



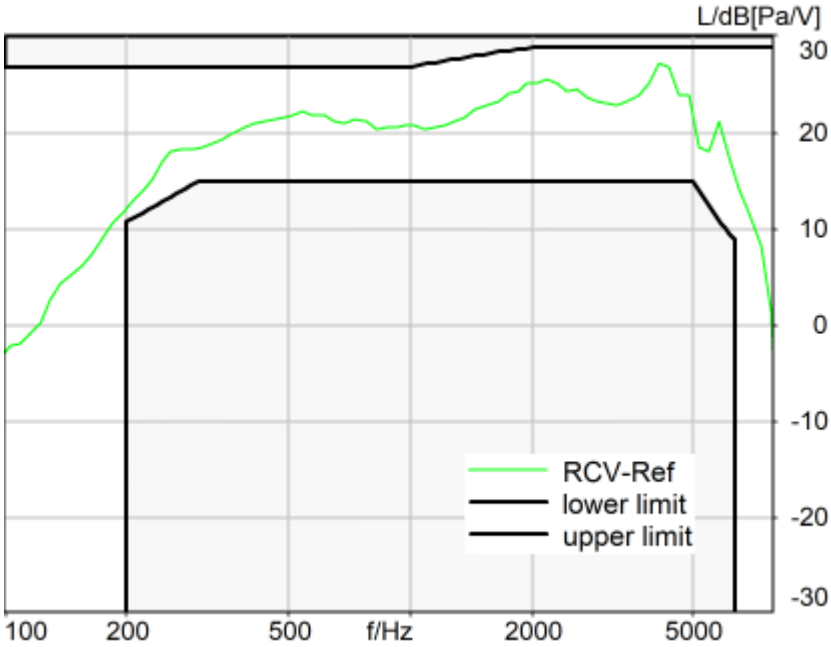
Absolute minimal distance
2.70 dB at 4369.4 Hz Ok

Ok

2024/5/16 16:09 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



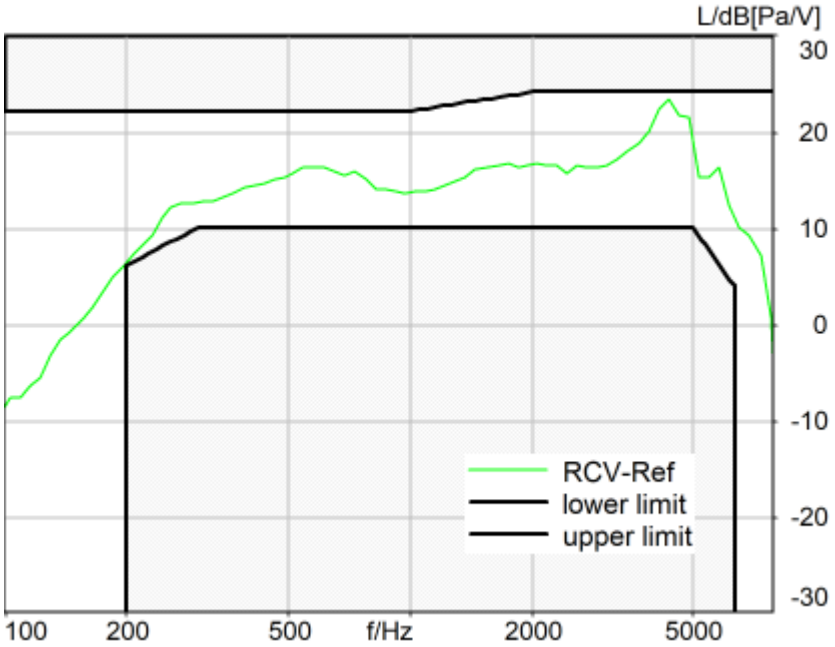
Absolute minimal distance
1.61 dB at 205.7 Hz Ok

Ok

2024/5/16 16:10 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



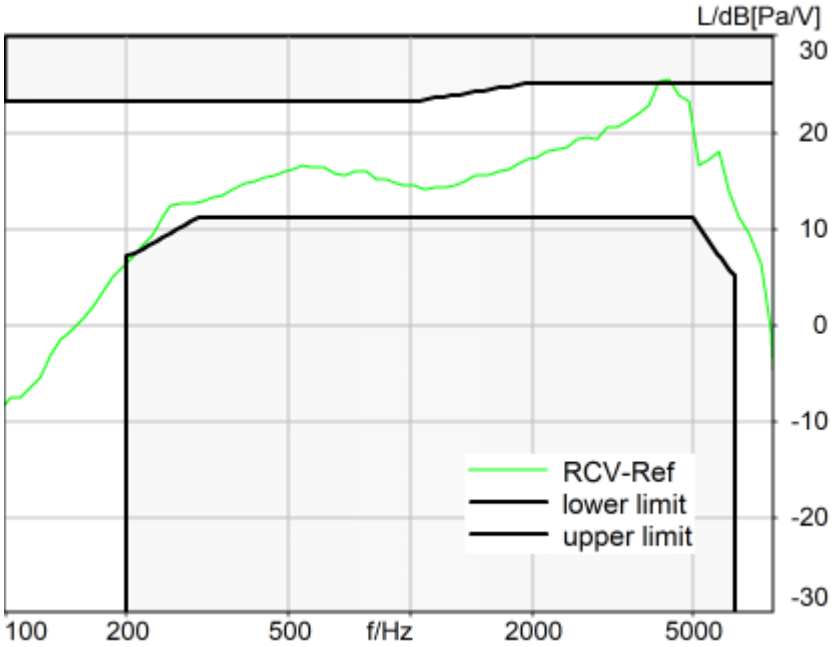
Absolute minimal distance
0.74 dB at 4369.4 Hz Ok

Ok

2024/5/16 16:17 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Absolute minimal distance
-0.33 dB at 205.7 Hz Not Ok

Not Ok

2024/5/16 16:18 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

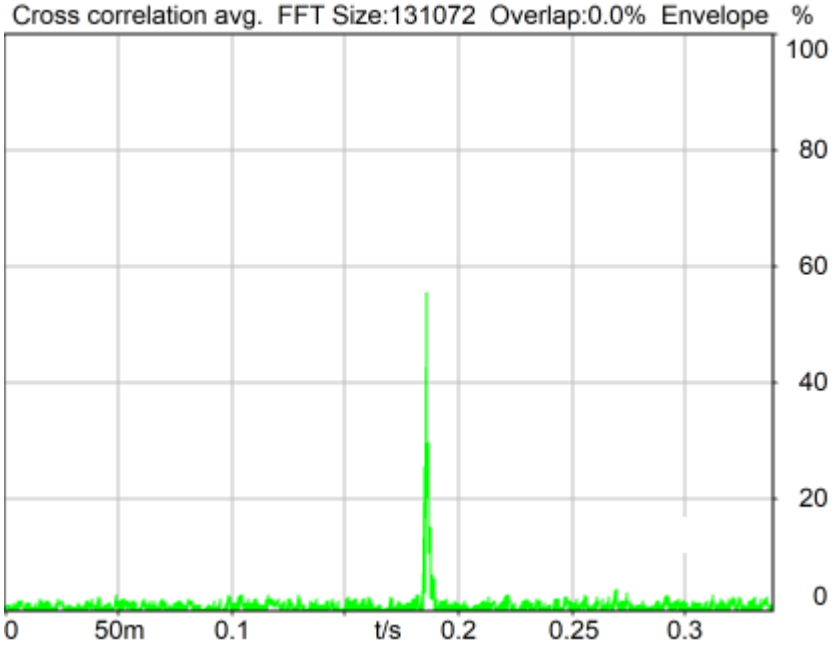
Measurement Object	WIFI 5.8G_802.11a 6M_EVS NB 24.4kbps_CH157
Description	HMD_TA_1600#Tomcat

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/22 12:29
Responsible Person	audio

Overall Receive Delay NB, Index: 1 3
5.1a Receive Volume Control Performance 8N NB, Index: 1 3
5.1b Receive Volume Control Performance 2N NB, Index: 1 4
5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1 5
5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1 6
5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1 7
5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1 7
5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1 8
5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1 9
5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1 9
5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1 10
5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1 11
5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1 11
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 12
5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1 13
5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1 13
5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1 14
5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1 15
5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1 15
5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1 16
5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1 17
5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1 17
5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1 18
5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1 19
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 19
5.3 Frequency Response 8N FF HANB, Index: 1 20
5.3 Frequency Response 8N DF HANB, Index: 1 21
5.3 Frequency Response 2N FF HANB, Index: 1 21
5.3 Frequency Response 2N DF HANB, Index: 1 22

Overall Receive Delay NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ Preparation - Delay measurement

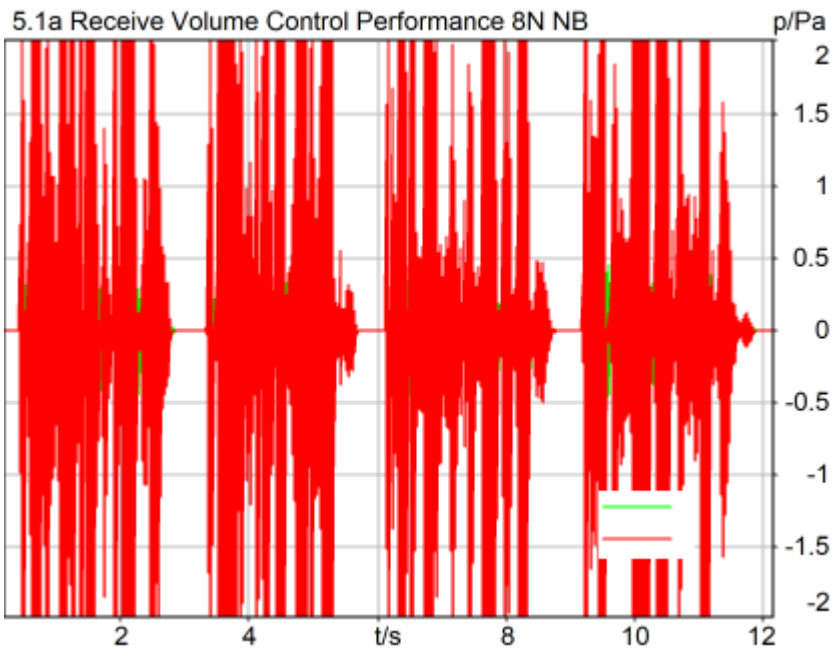


Channel	Delay
RCV*Source	186.4 ms

2024/5/8 16:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.1a Receive Volume Control Performance 8N NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Correction

X - 70

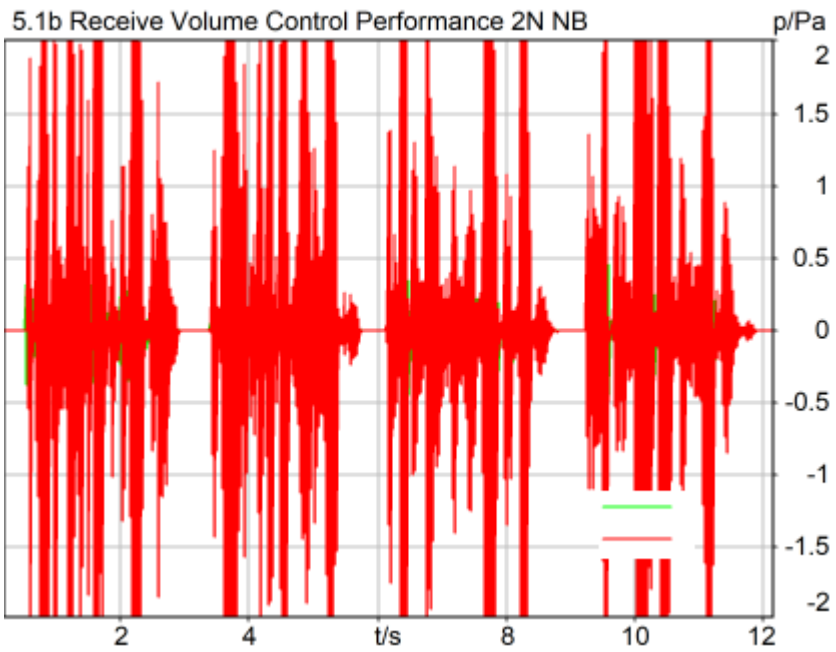
Channel	Speech level	Activity	Corrected speech level	
RCV	93.14 dB[SPL]	80.73%	23.14 dB[SPL]	Ok

Ok

2024/5/8 16:53 ACQUA 6.0.200

5.1b Receive Volume Control Performance 2N NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Correction

X - 70

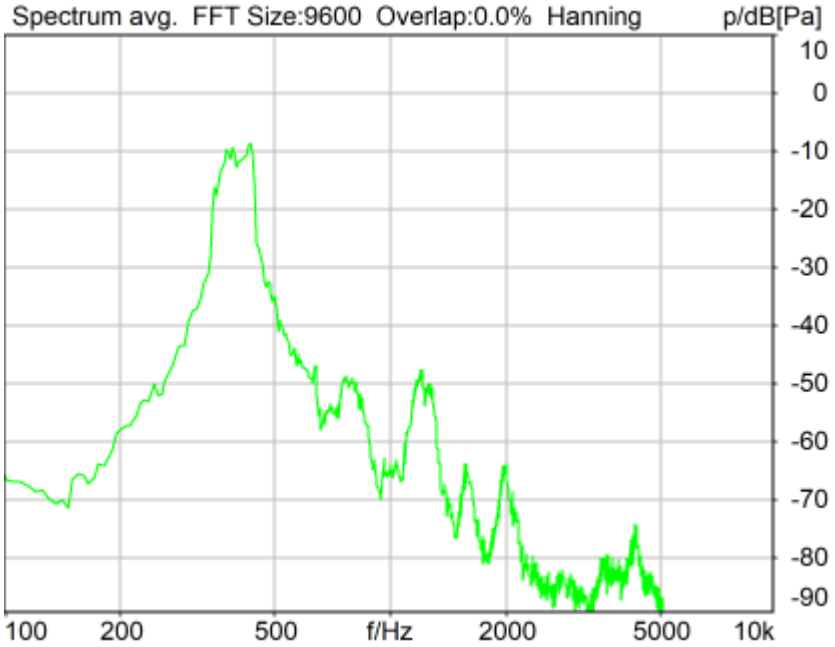
Channel	Speech level	Activity	Corrected speech level	
RCV	87.80 dB[SPL]	80.40%	17.80 dB[SPL]	Ok

Ok

2024/5/8 16:48 ACQUA 6.0.200

5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



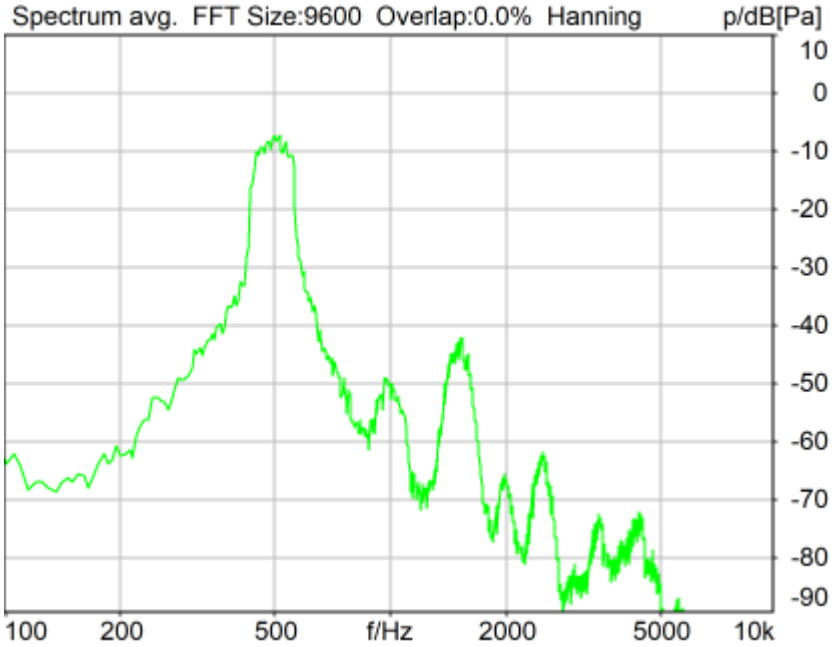
Distortion (Noise) RCV (packed): 28.55 dB (3.74%) Ok

Ok

2024/5/8 16:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



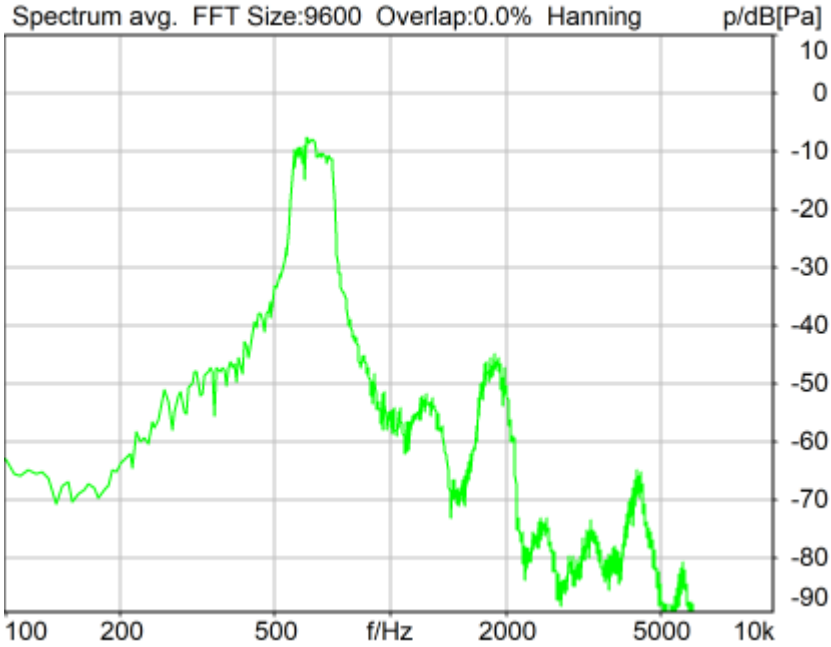
Distortion (Noise) RCV (packed): 27.97 dB (3.99%) Ok

Ok

2024/5/8 16:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



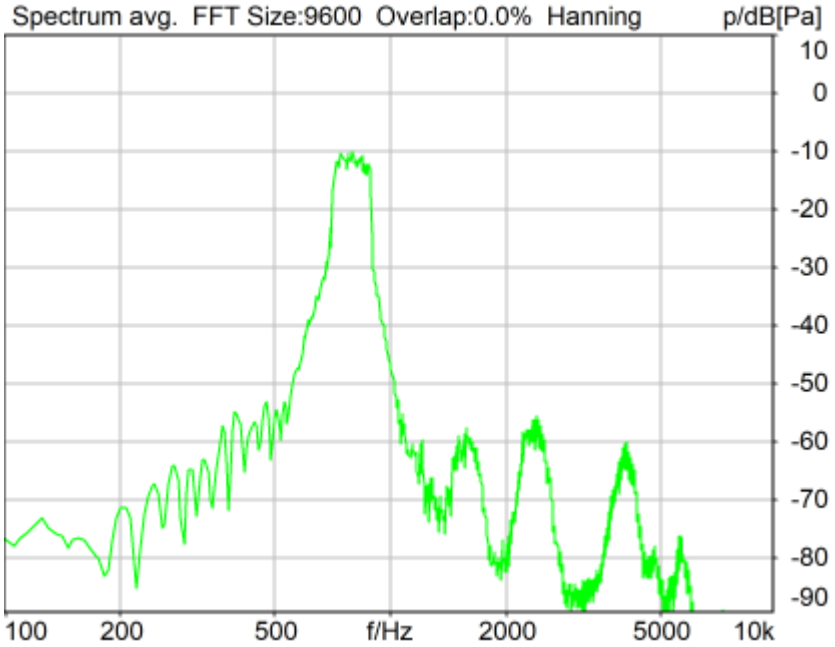
Distortion (Noise) RCV (packed): 27.40 dB (4.27%) Ok

Ok

2024/5/8 16:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



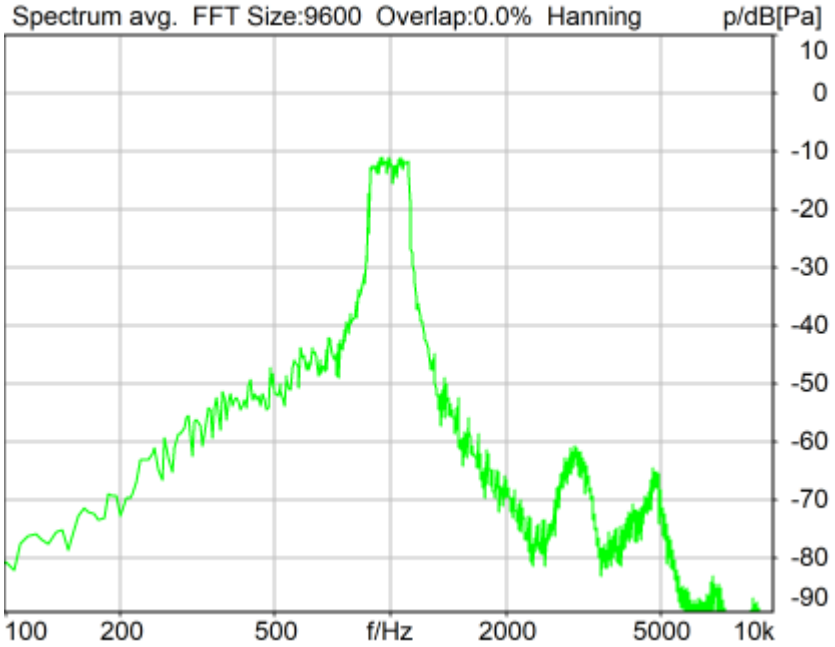
Distortion (Noise) RCV (packed): 27.67 dB (4.13%) Ok

Ok

2024/5/8 16:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



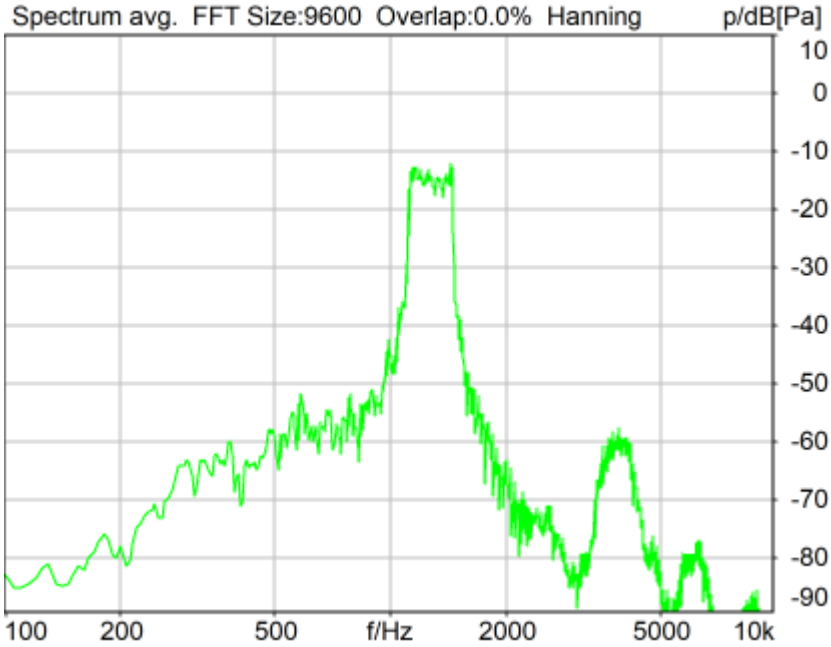
Distortion (Noise) RCV (packed): 25.70 dB (5.19%) Ok

Ok

2024/5/8 16:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



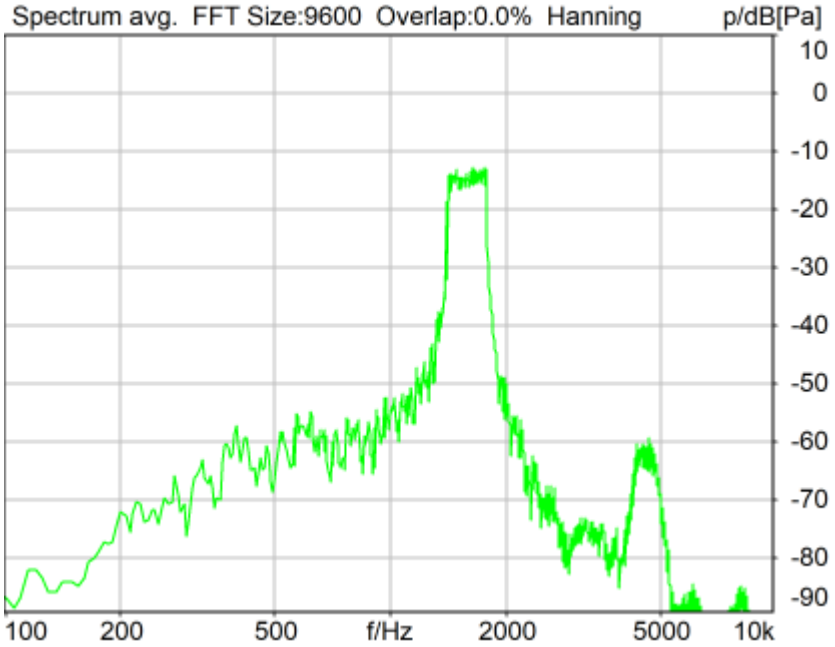
Distortion (Noise) RCV (packed): 23.33 dB (6.82%) Ok

Ok

2024/5/8 16:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



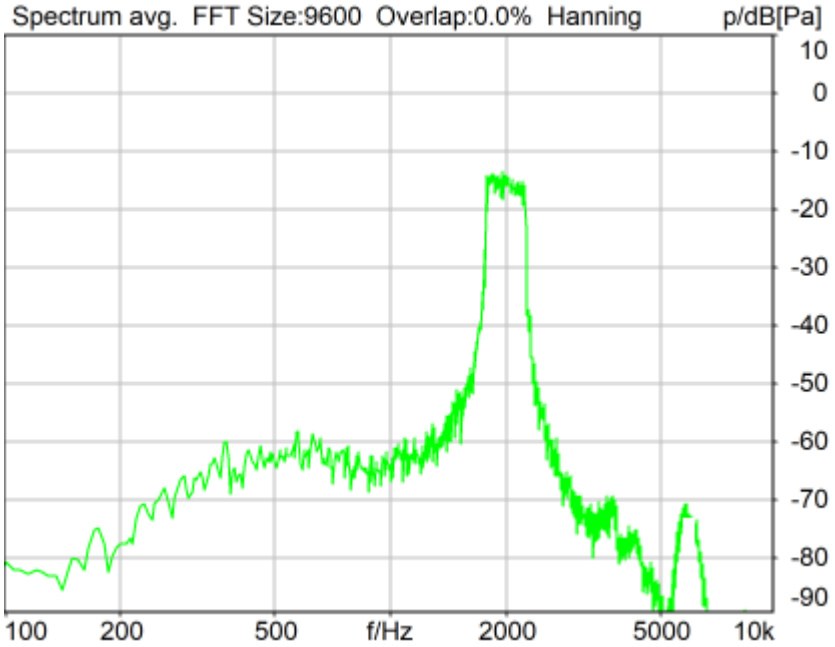
Distortion (Noise) RCV (packed): 27.73 dB (4.10%) Ok

Ok

2024/5/8 16:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



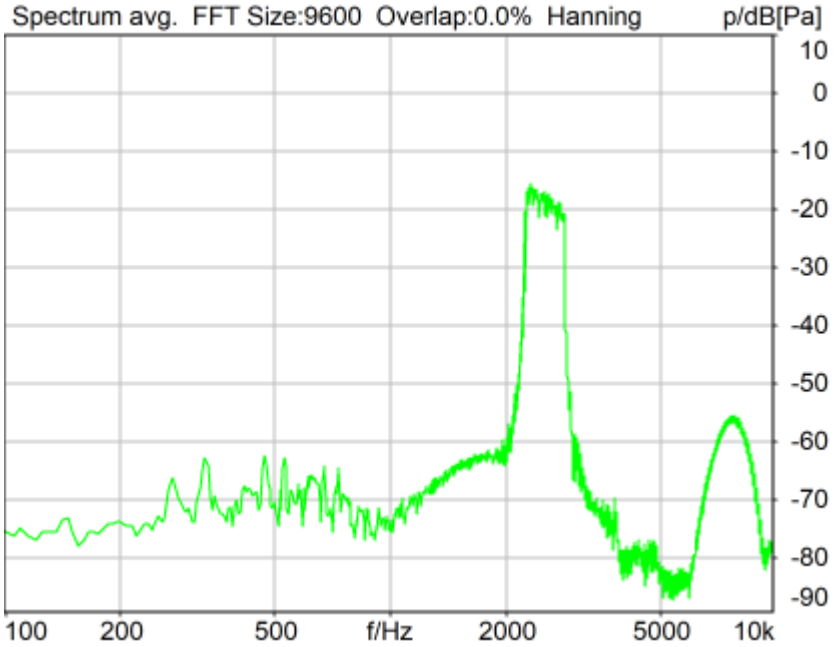
Distortion (Noise) RCV (packed): 27.77 dB (4.09%) Ok

Ok

2024/5/8 16:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



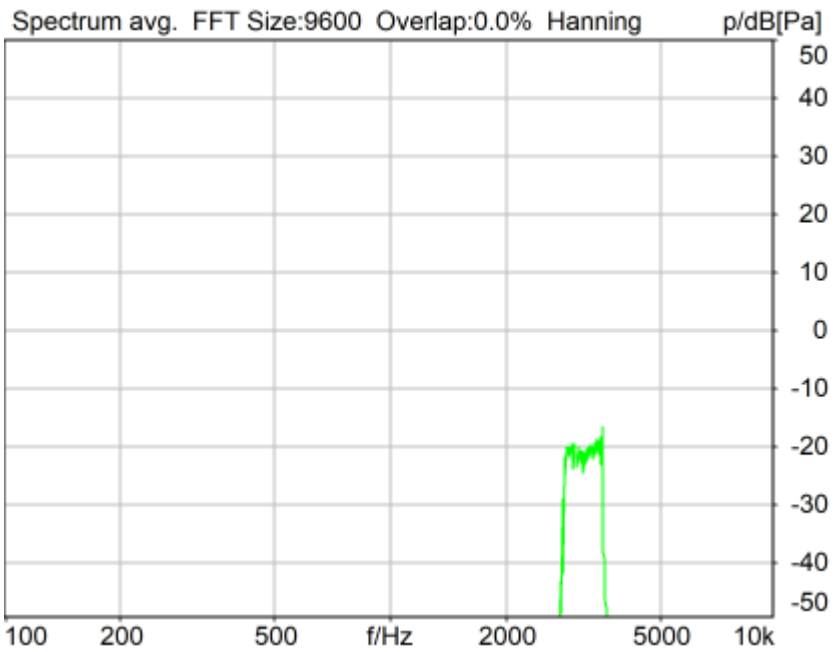
Distortion (Noise) RCV (packed): 29.92 dB (3.19%) Ok

Ok

2024/5/8 16:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 30.37 dB (3.03%) Ok

Ok

2024/5/8 16:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N

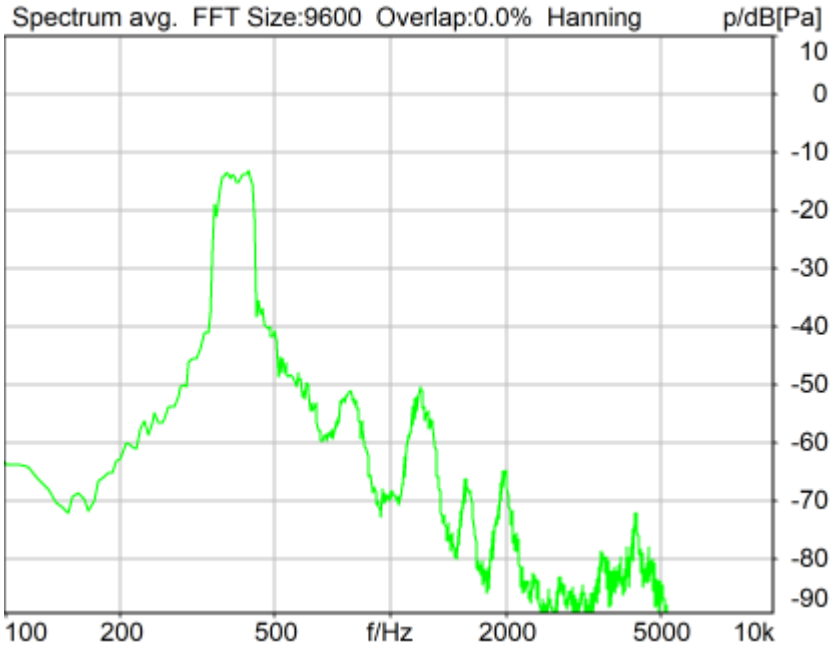
Region	Frequency	SDNR
1	400Hz	28.55 dB
2	500Hz	27.97 dB
3	630Hz	27.40 dB
4	800Hz	27.67 dB
5	1000Hz	25.70 dB
6	1250Hz	23.33 dB
7	1600Hz	27.73 dB
8	2000Hz	27.77 dB
9	2500Hz	29.92 dB
10	3150Hz	30.37 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.33dB at 1250Hz.

2024/5/8 16:57 ACQUA

5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



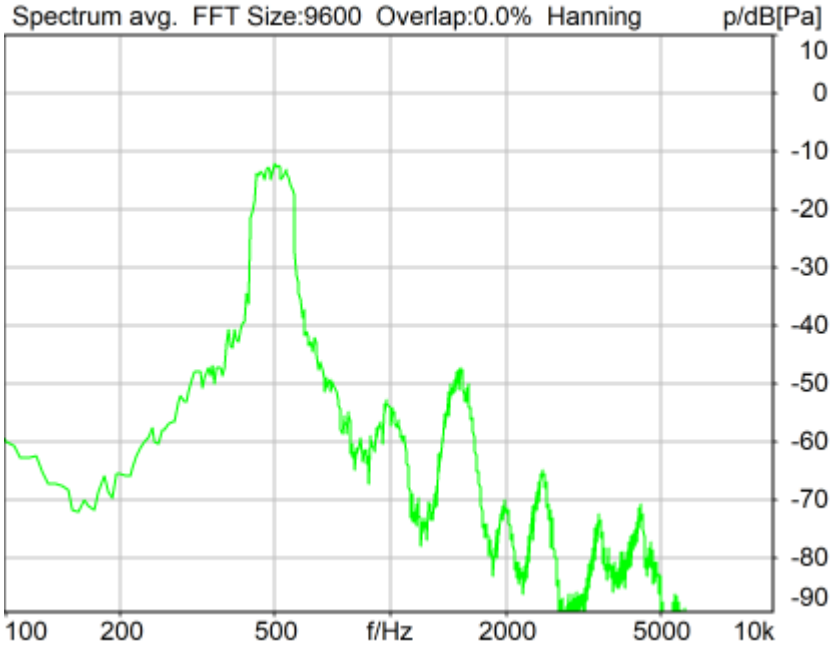
Distortion (Noise) RCV (packed): 29.99 dB (3.16%) Ok

Ok

2024/5/8 16:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



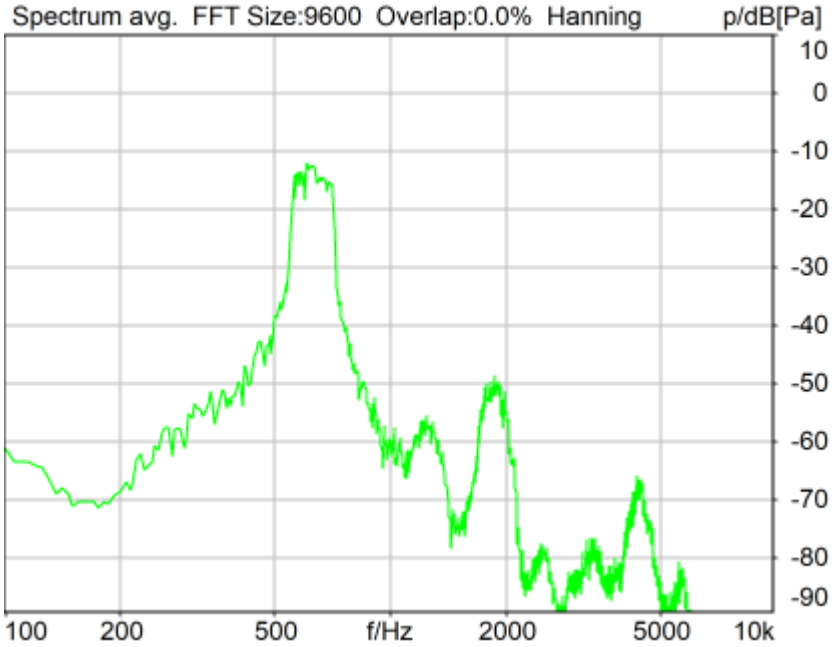
Distortion (Noise) RCV (packed): 28.92 dB (3.58%) Ok

Ok

2024/5/8 16:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



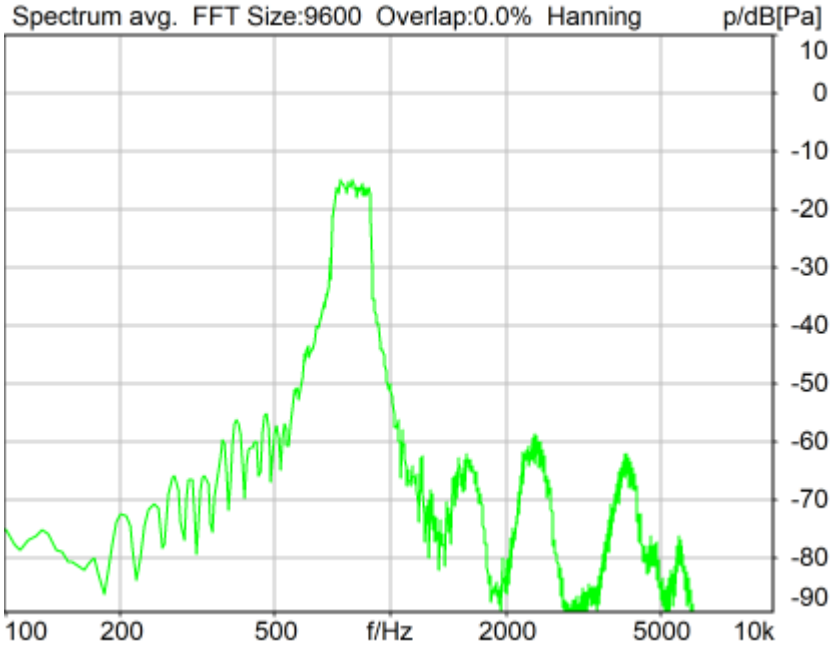
Distortion (Noise) RCV (packed): 27.78 dB (4.08%) Ok

Ok

2024/5/8 16:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



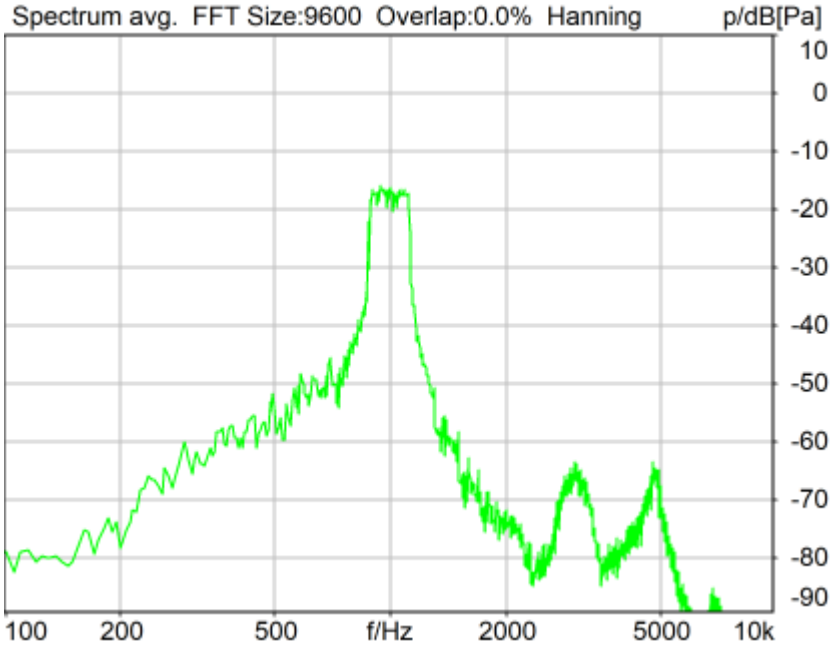
Distortion (Noise) RCV (packed): 27.85 dB (4.05%) Ok

Ok

2024/5/8 16:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



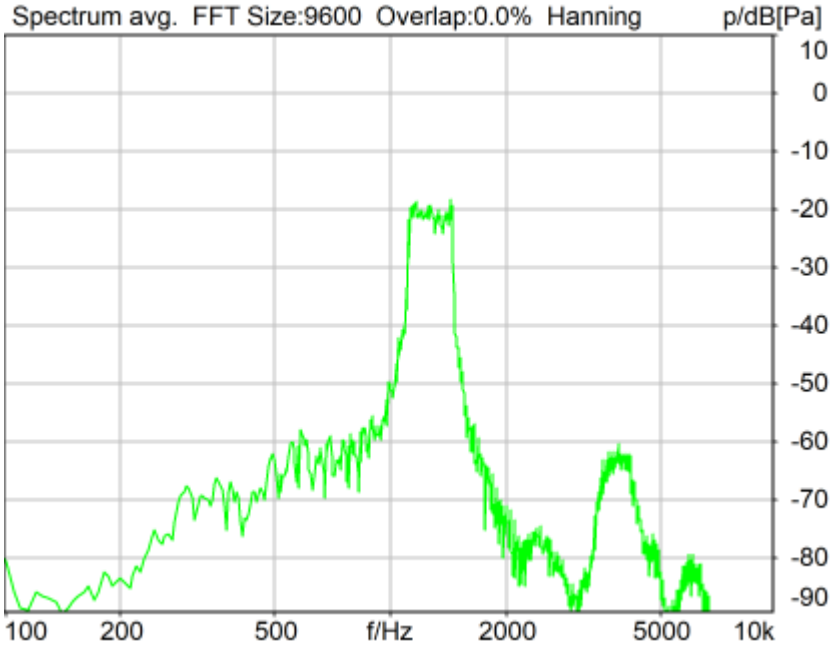
Distortion (Noise) RCV (packed): 25.83 dB (5.11%) Ok

Ok

2024/5/8 16:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



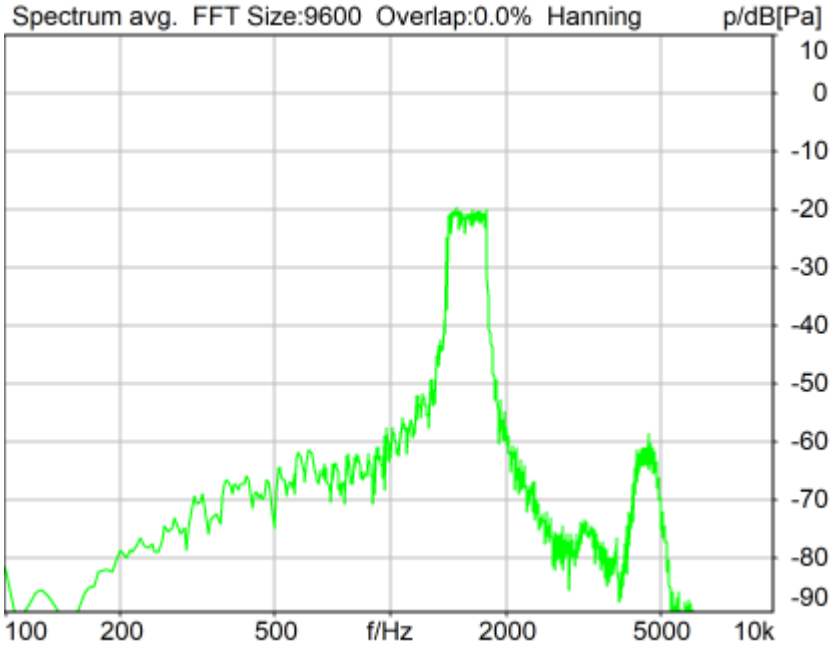
Distortion (Noise) RCV (packed): 22.18 dB (7.78%) Ok

Ok

2024/5/8 16:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



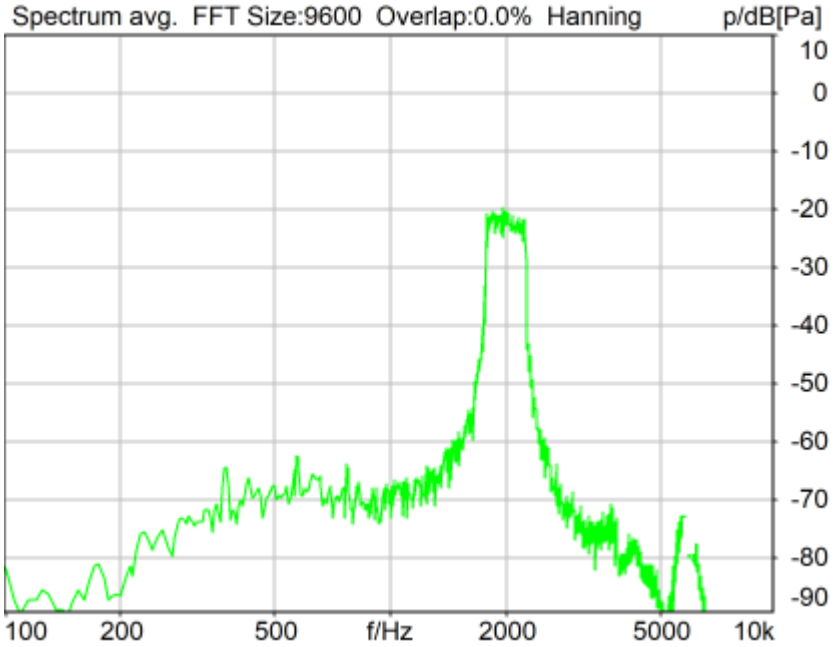
Distortion (Noise) RCV (packed): 26.31 dB (4.83%) Ok

Ok

2024/5/8 16:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



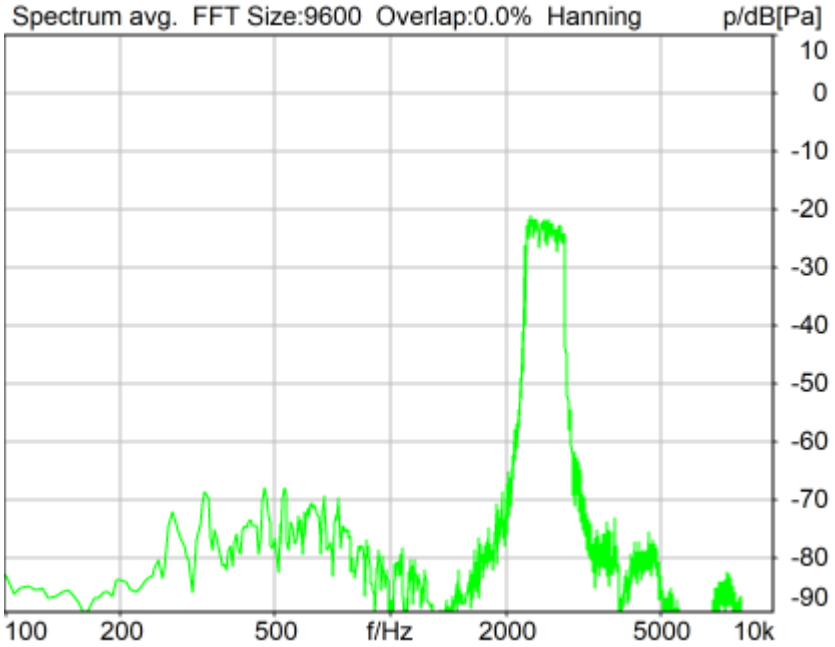
Distortion (Noise) RCV (packed): 27.34 dB (4.29%) Ok

Ok

2024/5/8 16:51 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



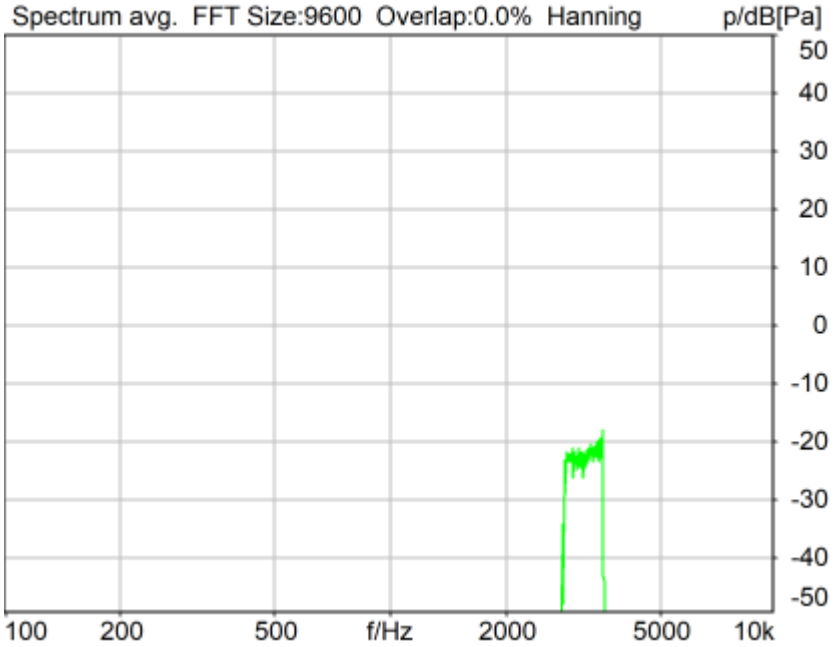
Distortion (Noise) RCV (packed): 32.39 dB (2.40%) Ok

Ok

2024/5/8 16:51 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



Distortion (Noise) RCV (packed): 36.29 dB (1.53%) Ok

Ok

2024/5/8 16:52 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N

Region	Frequency	SDNR
1	400Hz	29.99 dB

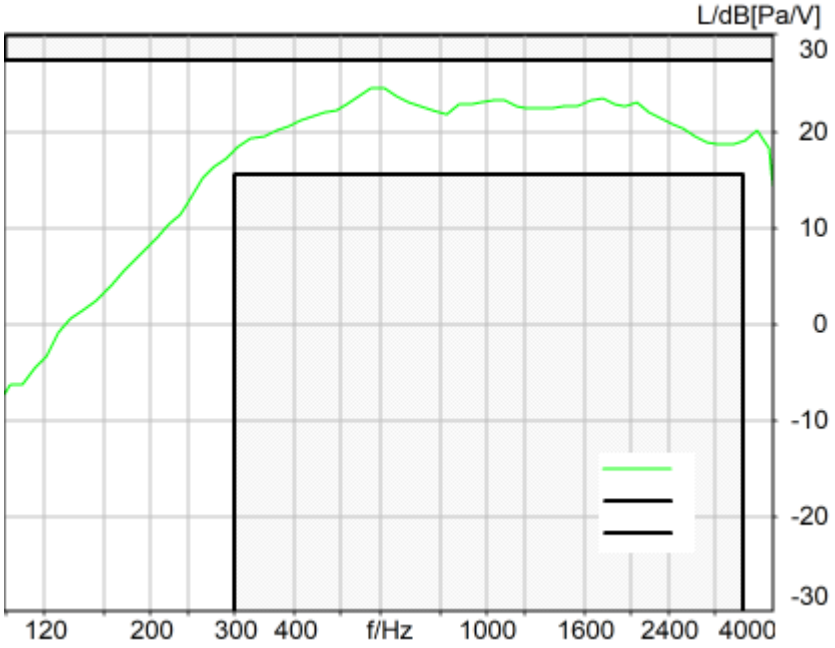
2	500Hz	28.92 dB
3	630Hz	27.78 dB
4	800Hz	27.85 dB
5	1000Hz	25.83 dB
6	1250Hz	22.18 dB
7	1600Hz	26.31 dB
8	2000Hz	27.34 dB
9	2500Hz	32.39 dB
10	3150Hz	36.29 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.18dB at 1250Hz.

2024/5/8 16:52 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



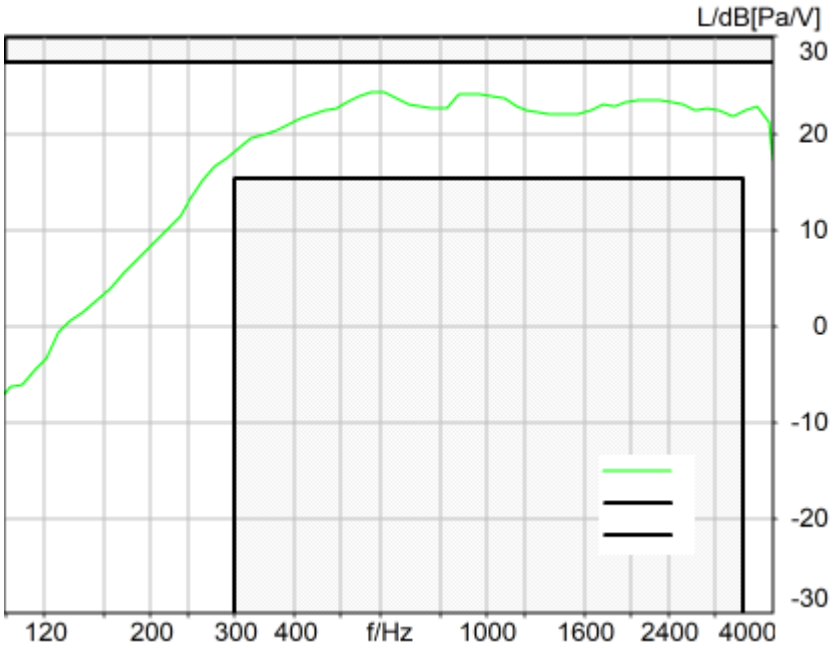
Absolute minimal distance
2.95 dB at 611.7 Hz Ok

Ok

2024/5/8 16:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



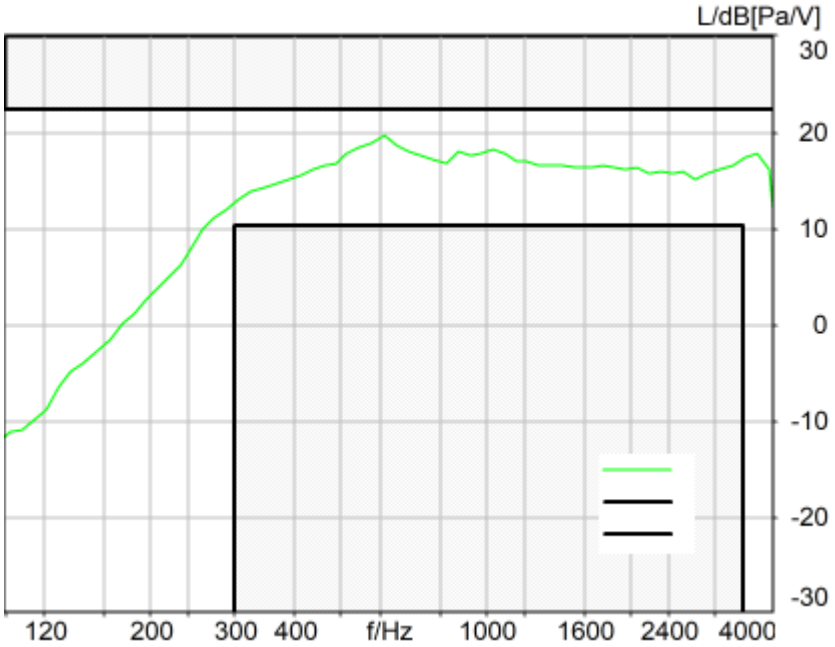
Absolute minimal distance
3.00 dB at 576.7 Hz Ok

Ok

2024/5/8 16:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



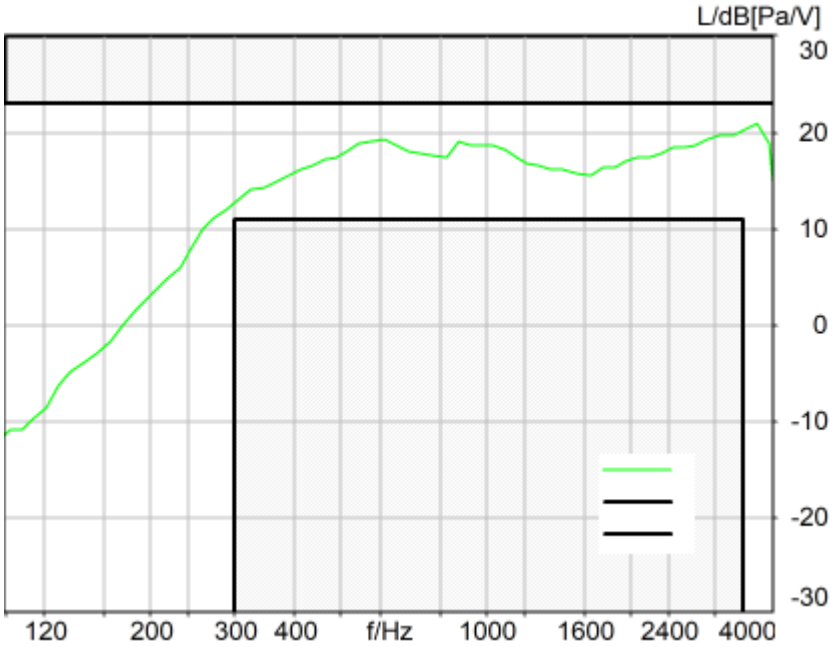
Absolute minimal distance
2.60 dB at 611.7 Hz Ok

Ok

2024/5/8 16:52 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Absolute minimal distance
2.00 dB at 3657.5 Hz Ok

Ok

2024/5/8 16:52 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

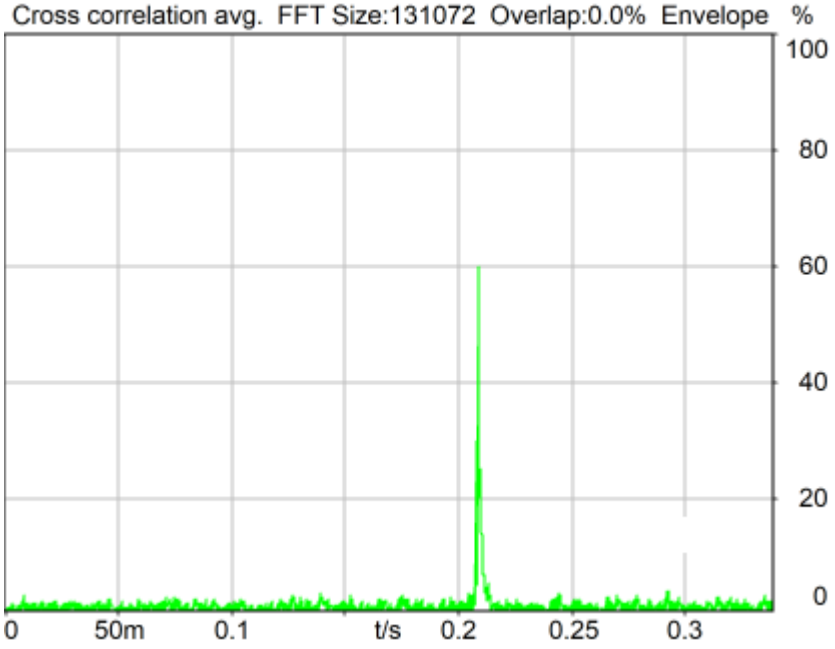
Measurement Object	WIFI 5.8G_802.11a 6M_EVS WB 24.4kbps_CH157
Description	HMD_TA_1600#Tomcat

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/22 12:30
Responsible Person	audio

Overall Receive Delay WB, Index: 1 3
5.1a Receive Volume Control Performance 8N WB, Index: 1 3
5.1b Receive Volume Control Performance 2N WB, Index: 1 4
5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1 5
5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 6
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 8
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1 10
5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1 11
5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1 11
5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1 12
5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1 13
5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1 13
5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1 14
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 15
5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1 15
5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 16
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 17
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 17
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 18
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 19
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 19
5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1 20
5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1 21
5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1 21
5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1 22
5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1 23
5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1 23
5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1 24
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 25
5.3 Frequency Response 8N FF, Index: 1 25
5.3 Frequency Response 8N DF, Index: 1 26
5.3 Frequency Response 2N FF, Index: 1 27
5.3 Frequency Response 2N DF, Index: 1 28

Overall Receive Delay WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement

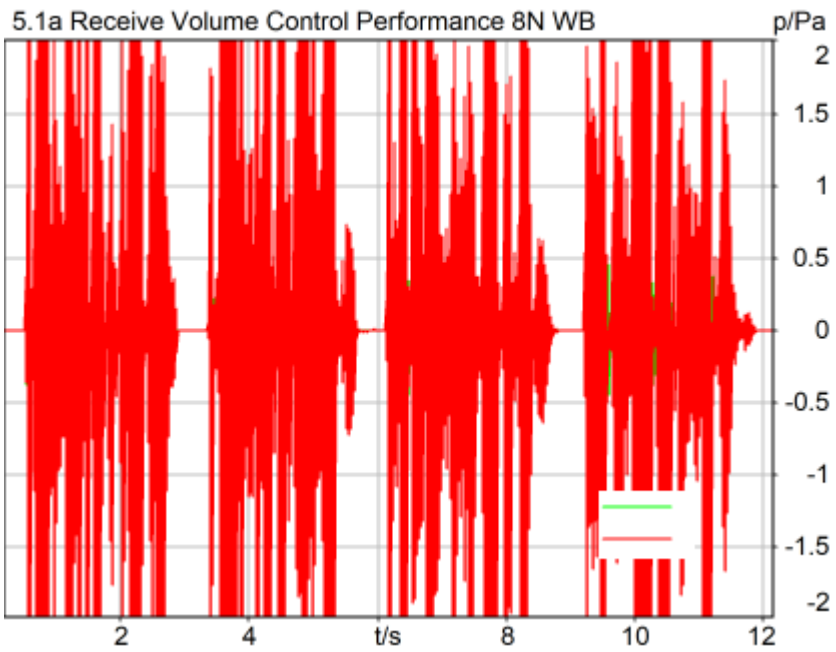


Channel	Delay
RCV*Source	209.2 ms

2024/5/8 17:01 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.1a Receive Volume Control Performance 8N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

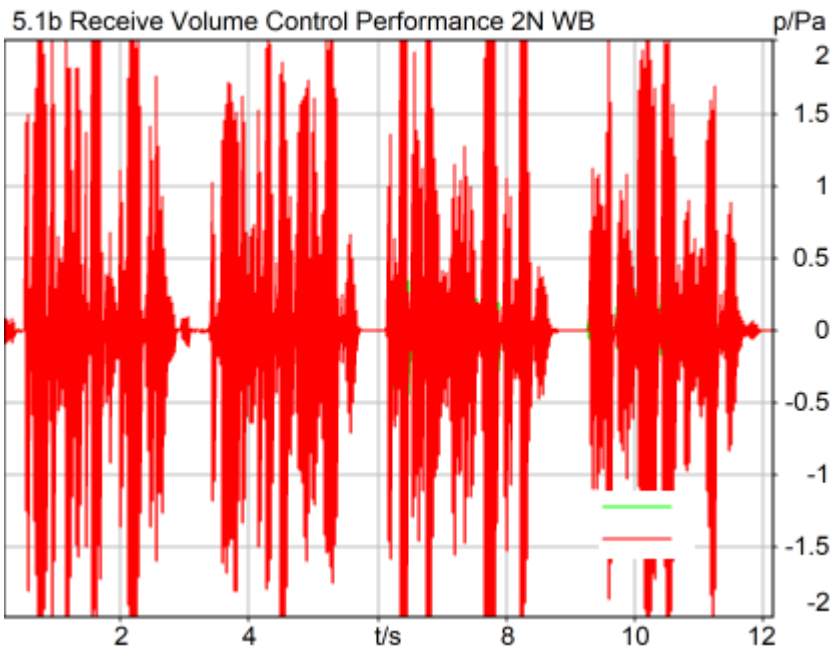
Channel	Speech level	Activity	Corrected speech level	
RCV	91.07 dB[SPL]	84.09%	21.07 dB[SPL]	Ok

Ok

2024/5/8 17:01 ACQUA 6.0.200

5.1b Receive Volume Control Performance 2N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

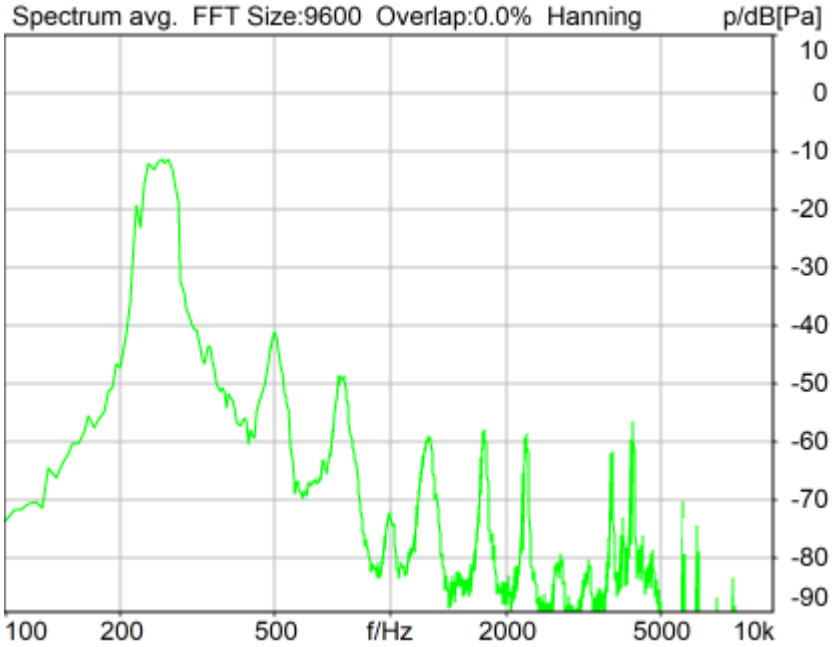
Channel	Speech level	Activity	Corrected speech level	
RCV	85.65 dB[SPL]	84.45%	15.65 dB[SPL]	Ok

Ok

2024/5/8 17:21 ACQUA 6.0.200

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



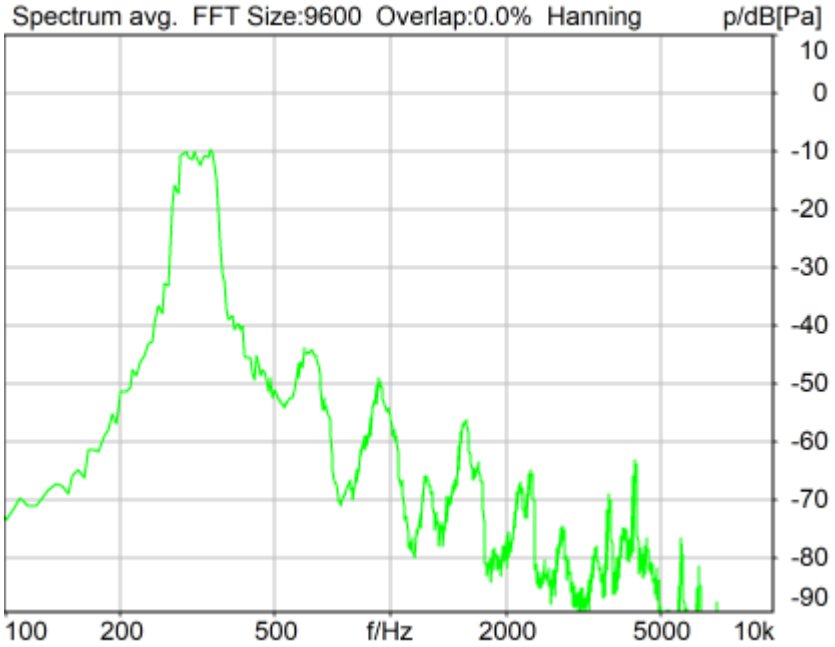
Distortion (Noise) RCV (packed): 30.81 dB (2.88%) Ok

Ok

2024/5/8 17:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



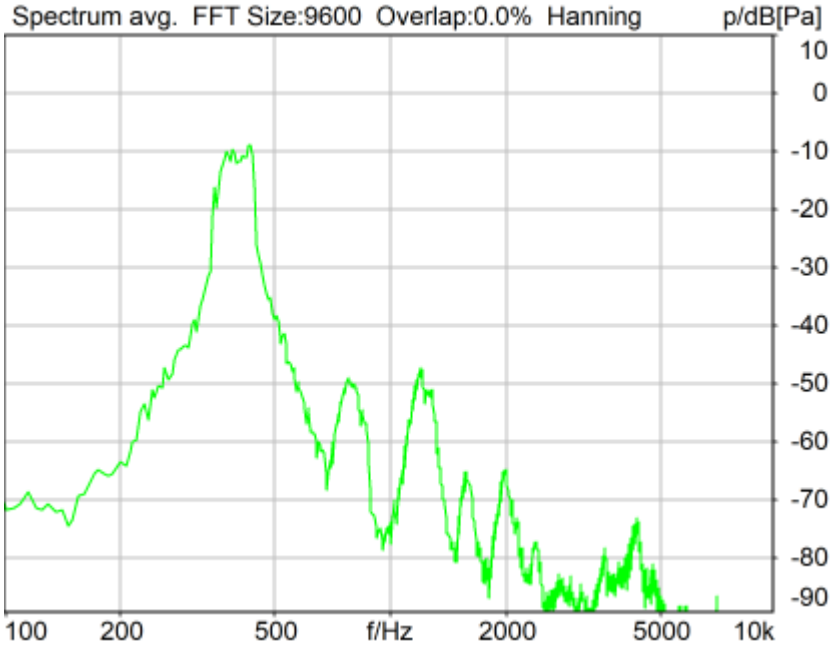
Distortion (Noise) RCV (packed): 31.50 dB (2.66%) Ok

Ok

2024/5/8 17:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



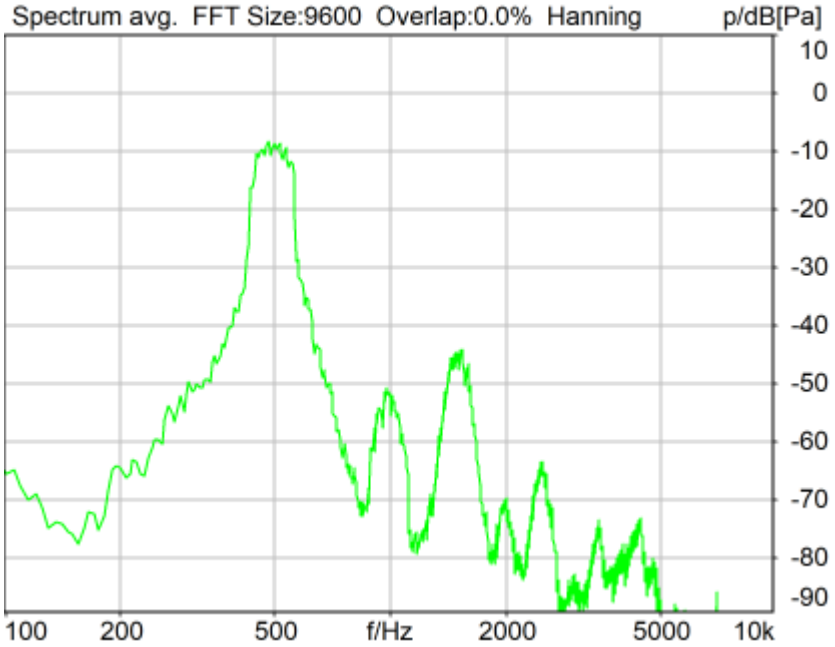
Distortion (Noise) RCV (packed): 30.33 dB (3.04%) Ok

Ok

2024/5/8 17:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



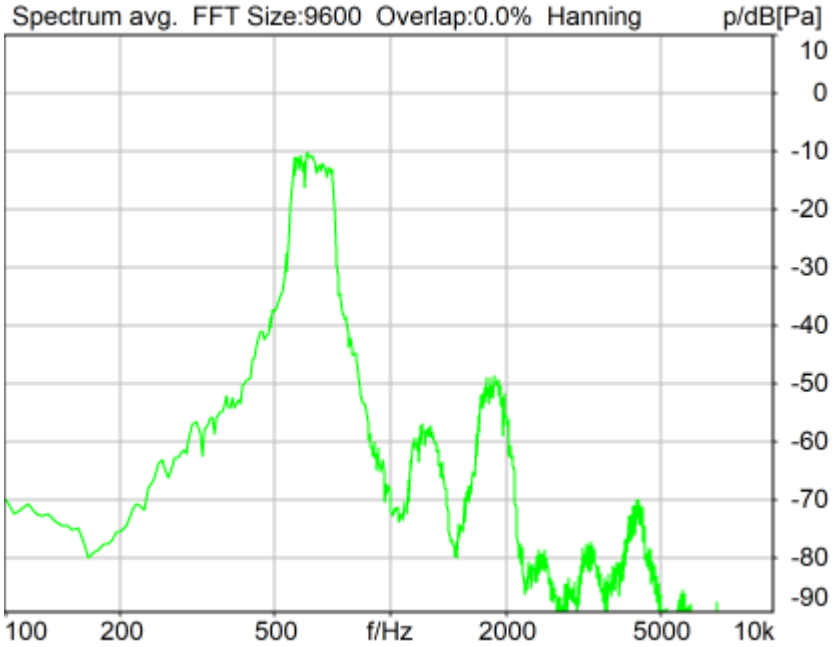
Distortion (Noise) RCV (packed): 29.41 dB (3.38%) Ok

Ok

2024/5/8 17:03 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



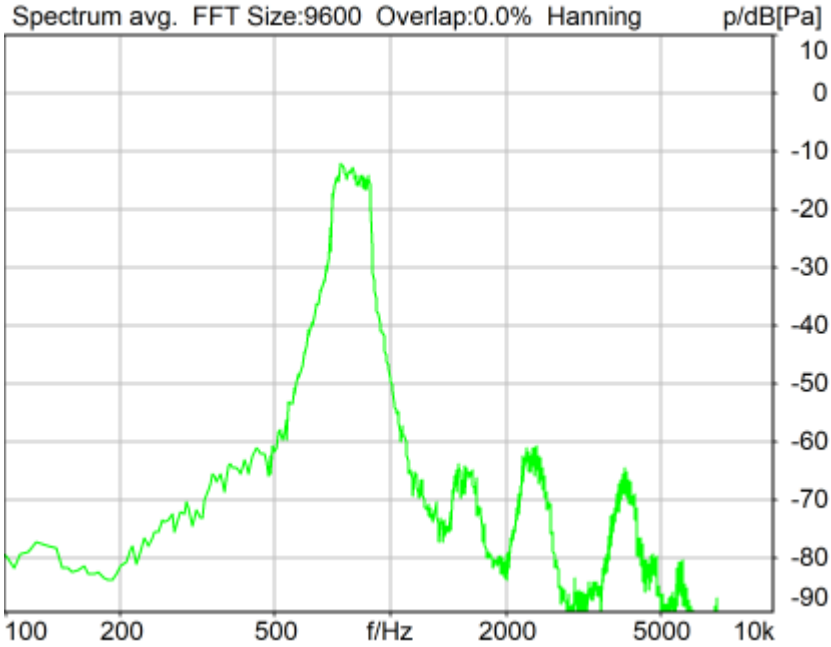
Distortion (Noise) RCV (packed): 28.83 dB (3.62%) Ok

Ok

2024/5/8 17:03 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



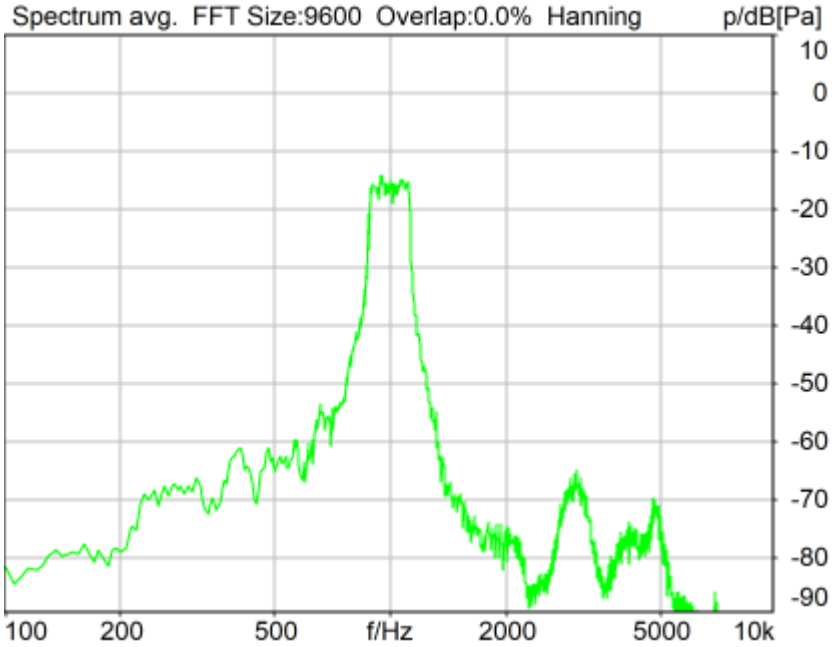
Distortion (Noise) RCV (packed): 26.91 dB (4.51%) Ok

Ok

2024/5/8 17:03 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



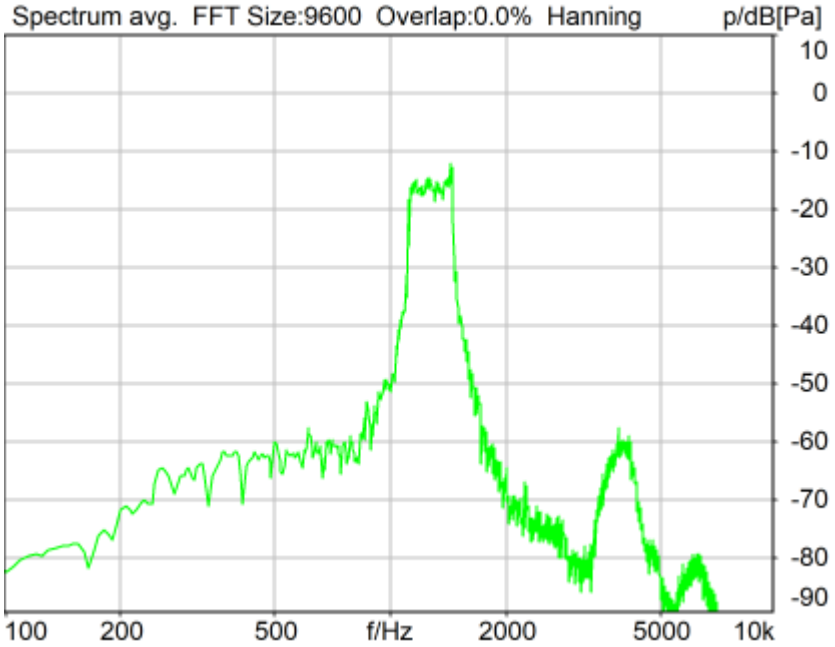
Distortion (Noise) RCV (packed): 28.18 dB (3.90%) Ok

Ok

2024/5/8 17:04 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



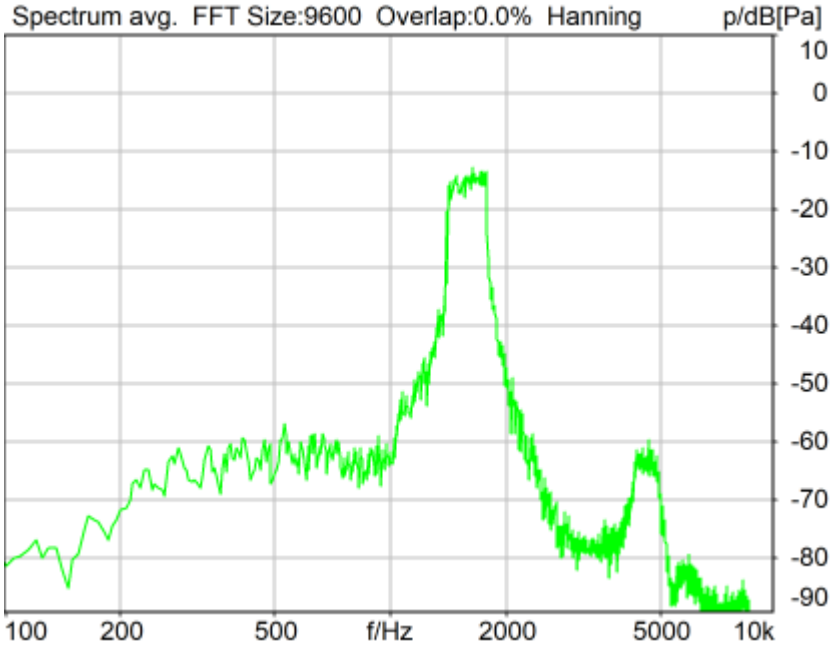
Distortion (Noise) RCV (packed): 20.23 dB (9.74%) Ok

Ok

2024/5/8 17:04 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



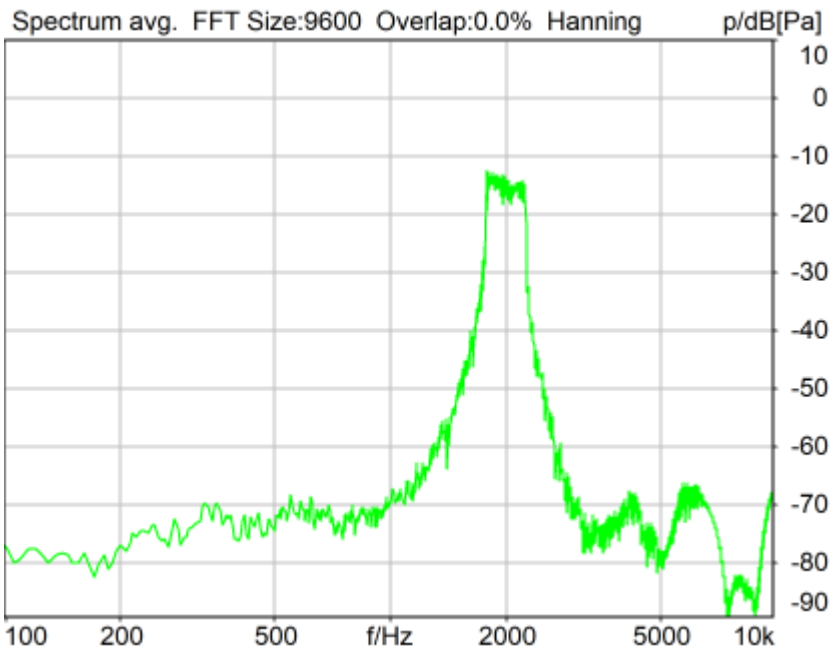
Distortion (Noise) RCV (packed): 24.77 dB (5.77%) Ok

Ok

2024/5/8 17:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



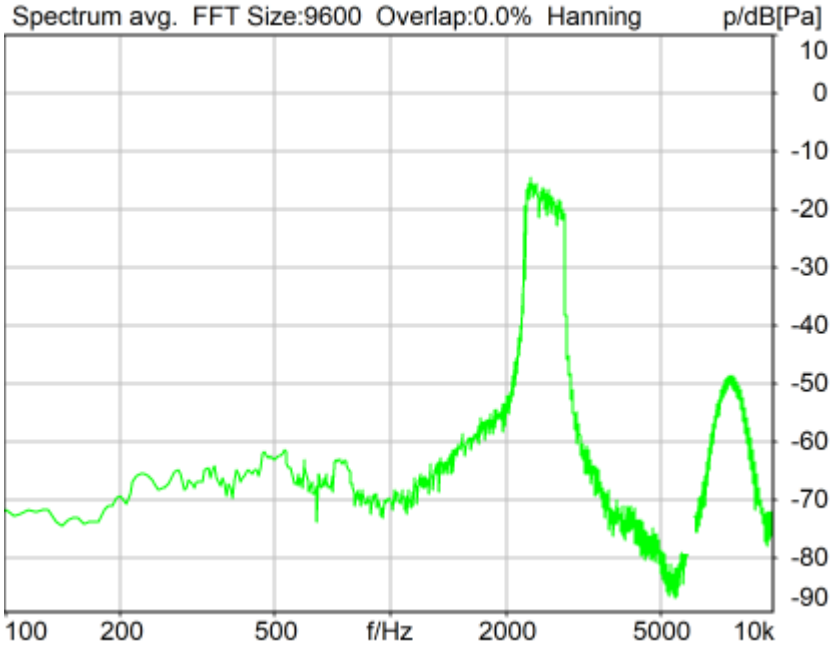
Distortion (Noise) RCV (packed): 23.70 dB (6.53%) Ok

Ok

2024/5/8 17:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



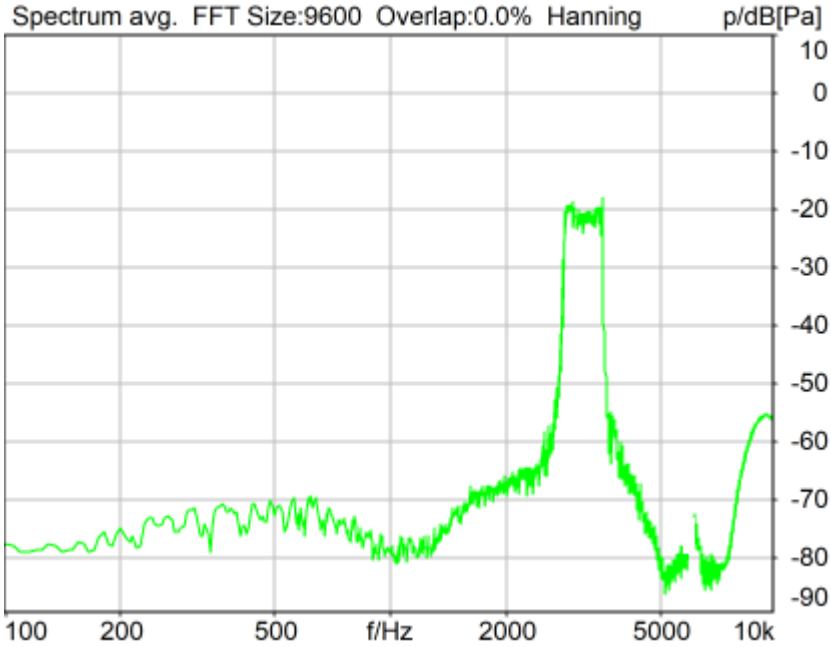
Distortion (Noise) RCV (packed): 26.12 dB (4.94%) Ok

Ok

2024/5/8 17:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



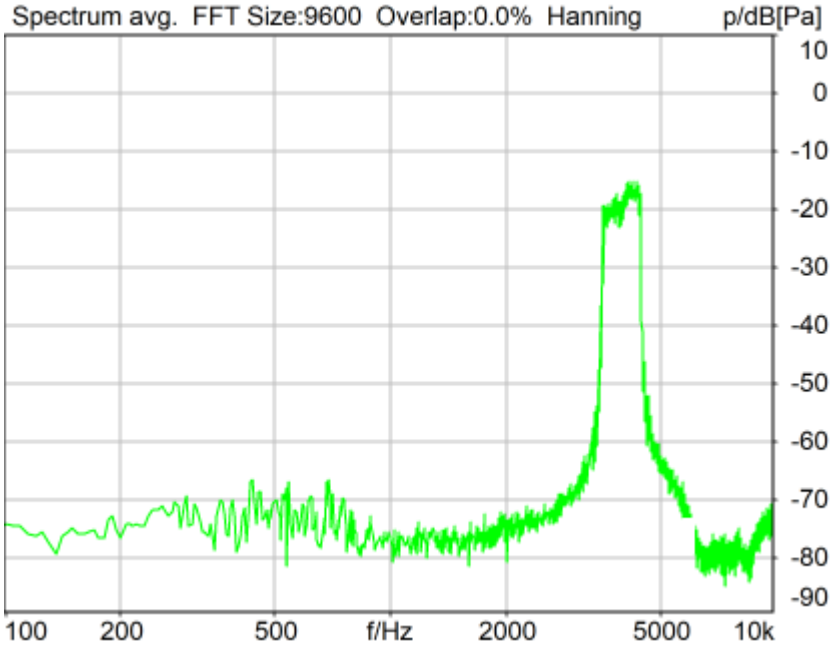
Distortion (Noise) RCV (packed): 28.55 dB (3.74%) Ok

Ok

2024/5/8 17:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



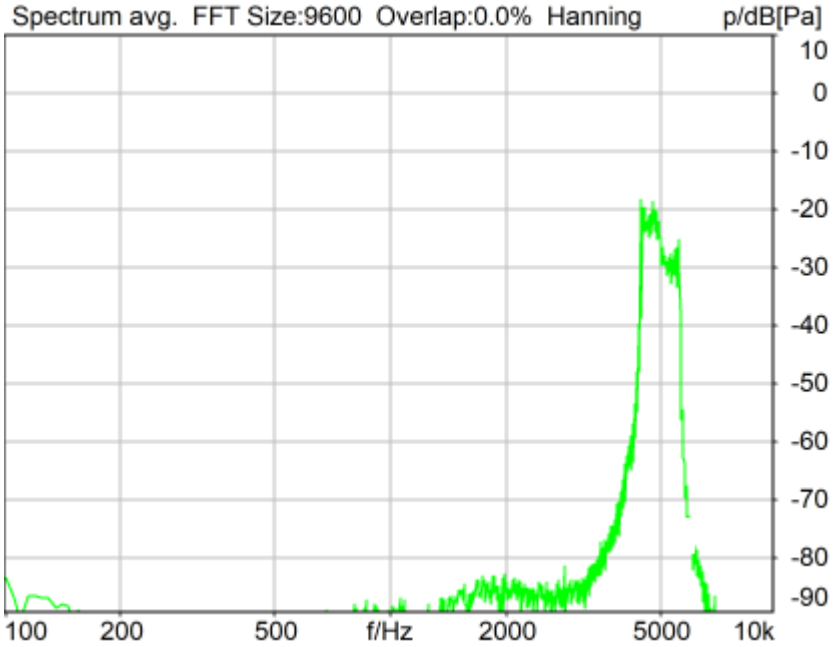
Distortion (Noise) RCV (packed): 32.60 dB (2.34%) Ok

Ok

2024/5/8 17:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 32.02 dB (2.51%) Ok

Ok

2024/5/8 17:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N

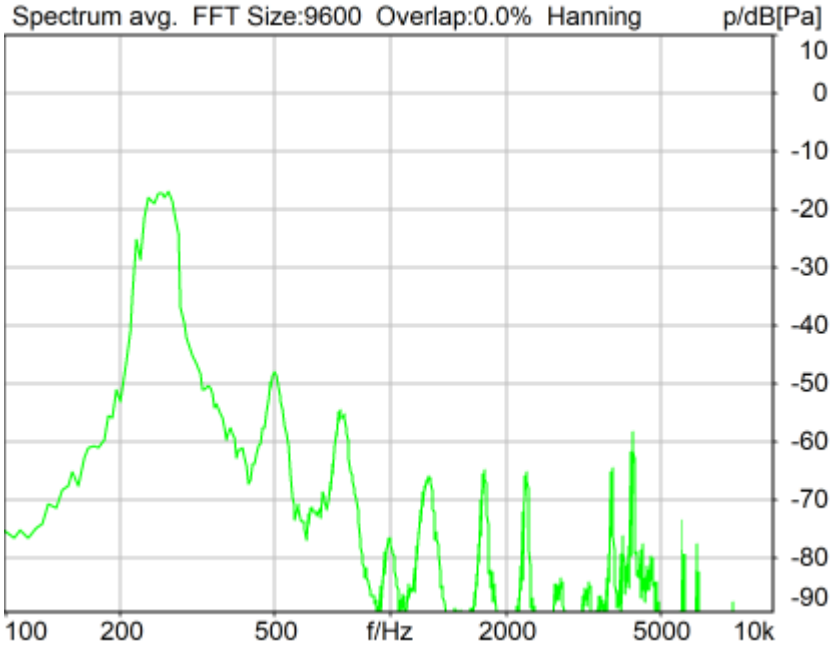
Region	Frequency	SDNR
1	250Hz	30.81 dB
2	315Hz	31.50 dB
3	400Hz	30.33 dB
4	500Hz	29.41 dB
5	630Hz	28.83 dB
6	800Hz	26.91 dB
7	1000Hz	28.18 dB
8	1250Hz	20.23 dB
9	1600Hz	24.77 dB
10	2000Hz	23.70 dB
11	2500Hz	26.12 dB
12	3150Hz	28.55 dB
13	4000Hz	32.60 dB
14	5000Hz	32.02 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 20.23dB at 1250Hz.

2024/5/8 17:07 ACQUA

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



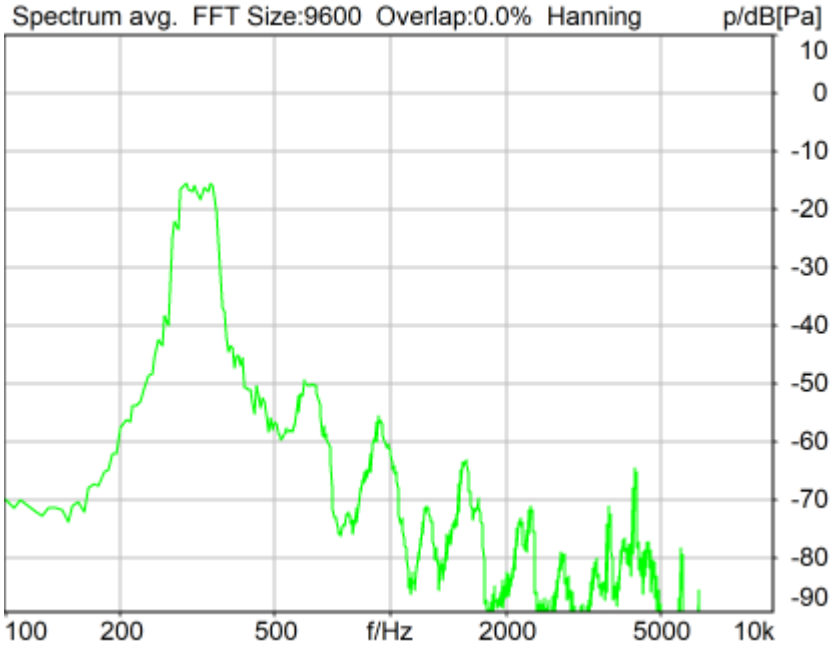
Distortion (Noise) RCV (packed): 30.80 dB (2.88%) Ok

Ok

2024/5/9 9:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



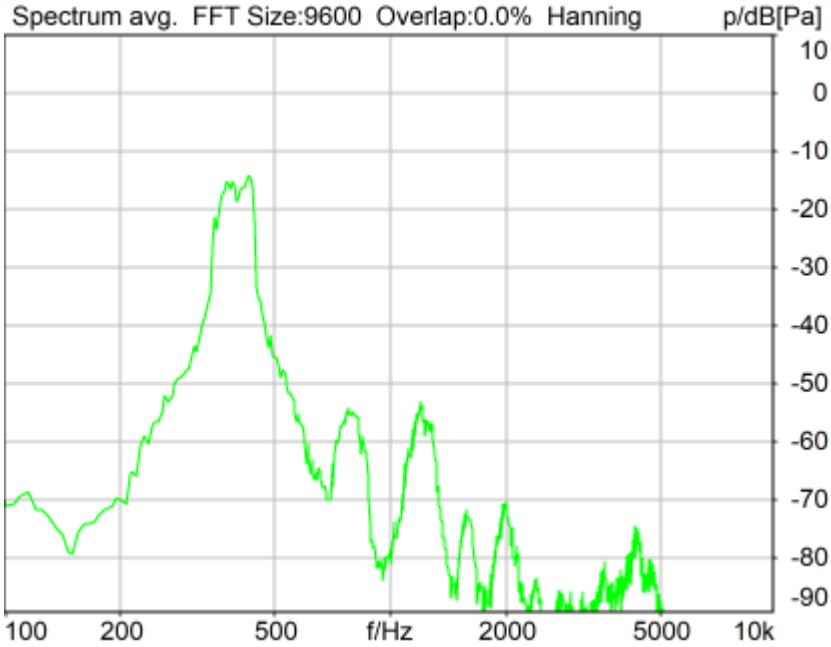
Distortion (Noise) RCV (packed): 31.49 dB (2.66%) Ok

Ok

2024/5/9 9:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



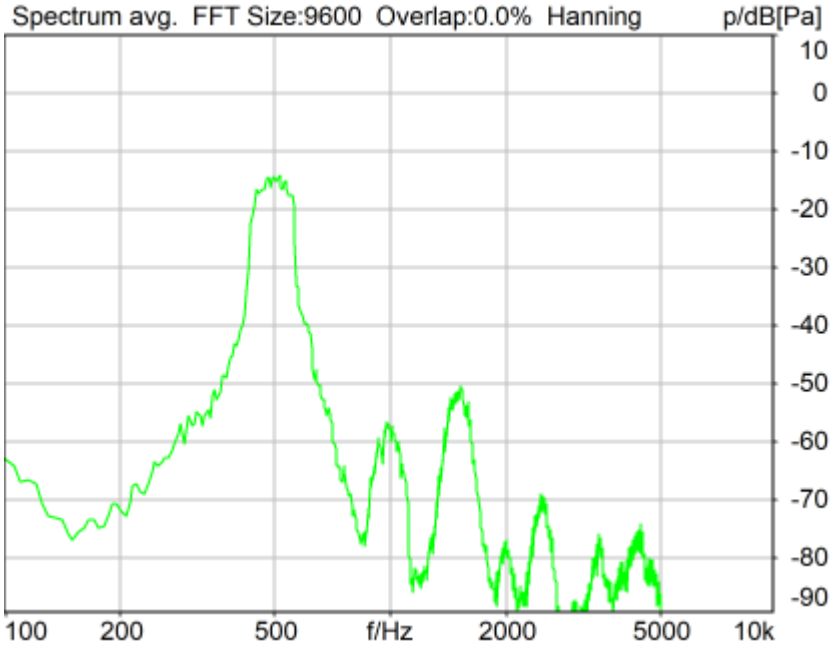
Distortion (Noise) RCV (packed): 30.89 dB (2.85%) Ok

Ok

2024/5/9 9:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



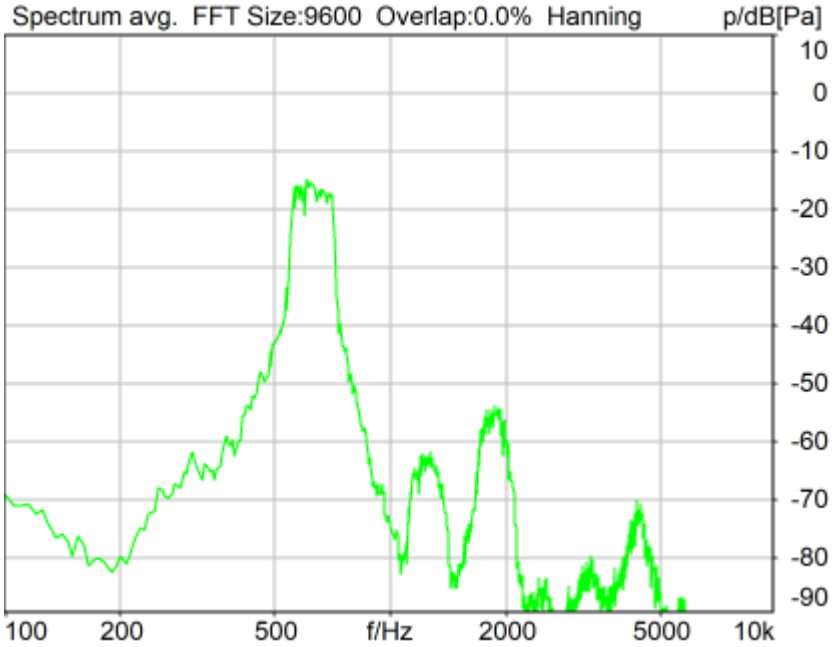
Distortion (Noise) RCV (packed): 29.09 dB (3.51%) Ok

Ok

2024/5/9 9:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



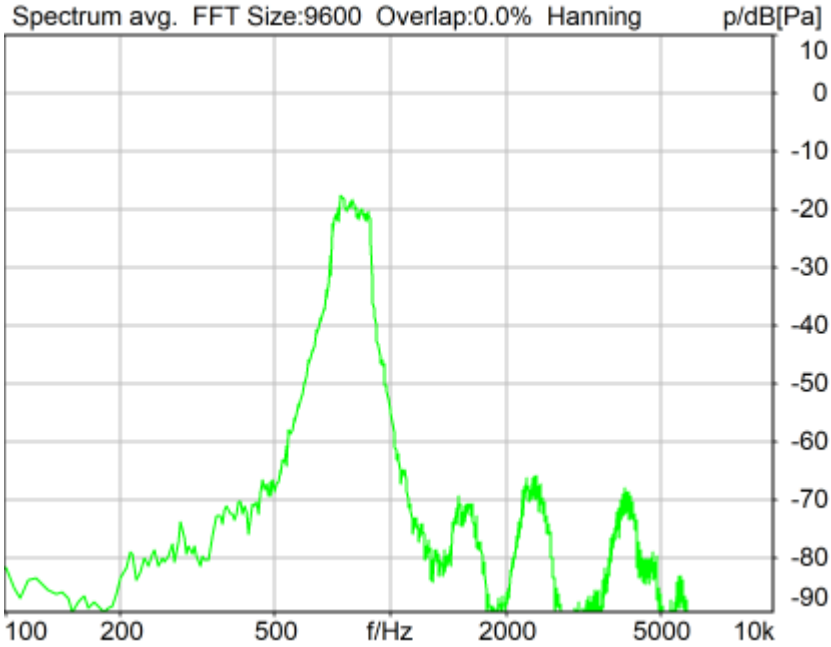
Distortion (Noise) RCV (packed): 29.72 dB (3.27%) Ok

Ok

2024/5/9 9:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



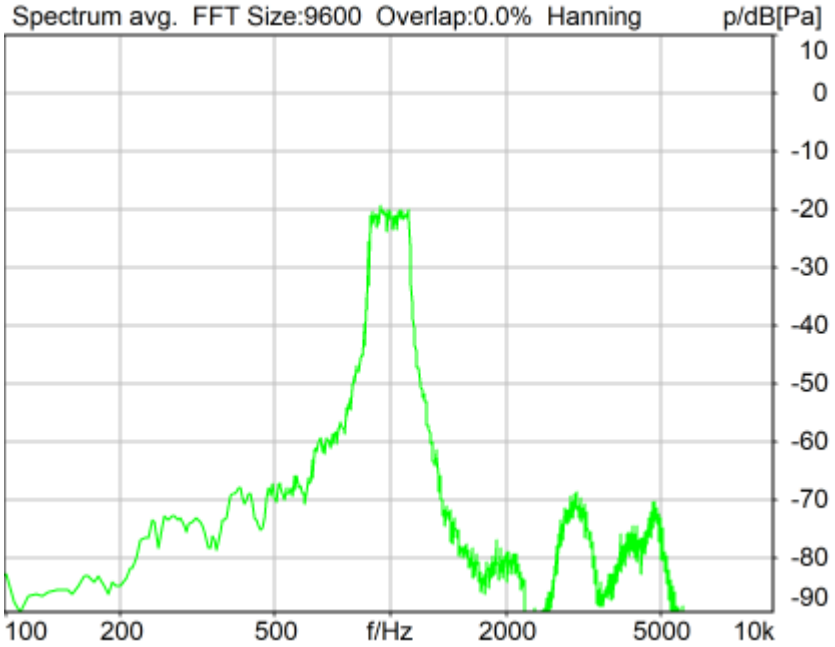
Distortion (Noise) RCV (packed): 26.20 dB (4.90%) Ok

Ok

2024/5/9 9:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



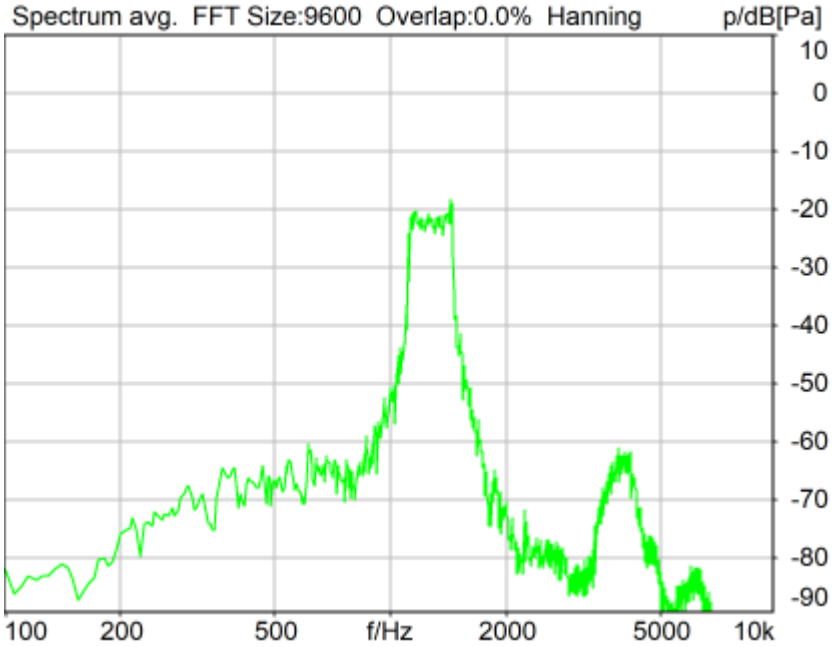
Distortion (Noise) RCV (packed): 28.75 dB (3.65%) Ok

Ok

2024/5/9 9:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



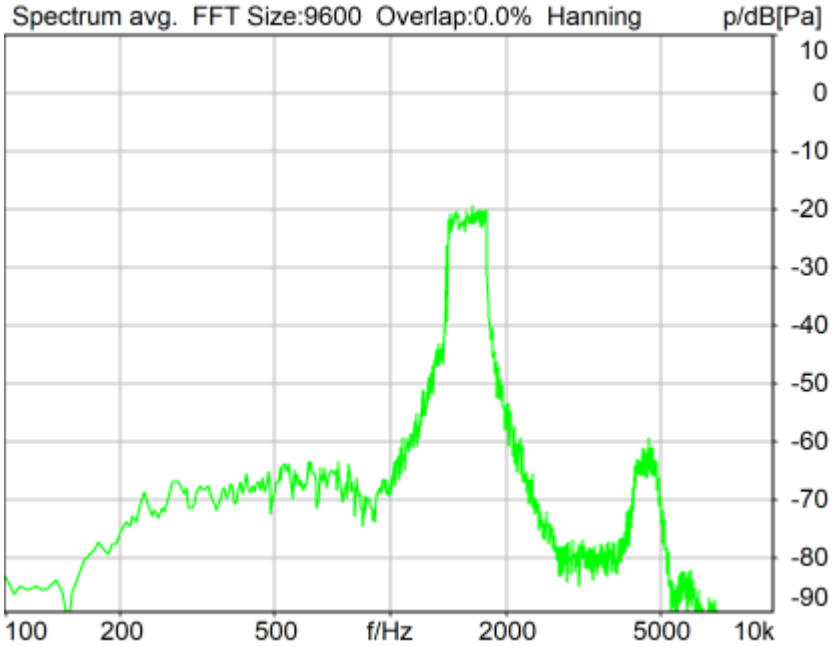
Distortion (Noise) RCV (packed): 20.34 dB (9.61%) Ok

Ok

2024/5/9 9:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



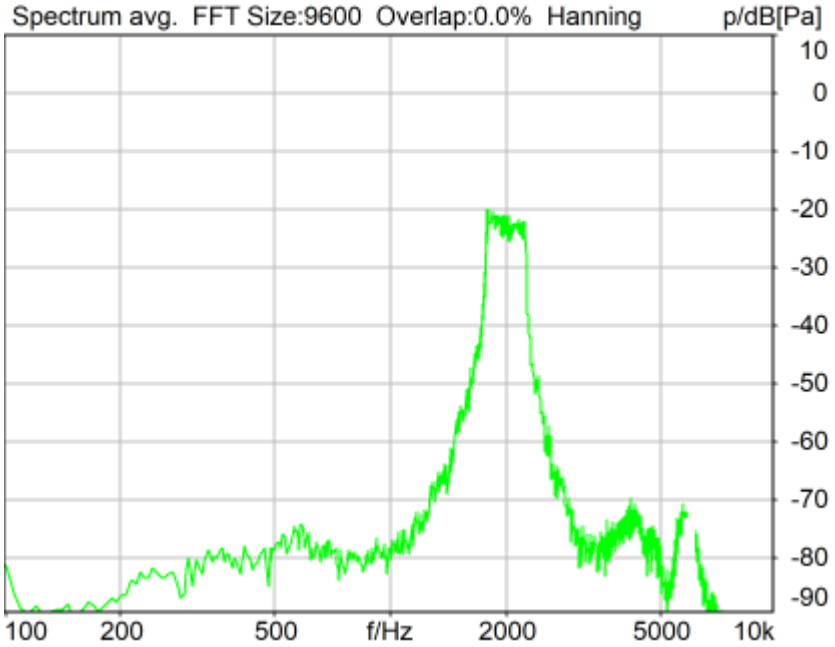
Distortion (Noise) RCV (packed): 24.77 dB (5.77%) Ok

Ok

2024/5/9 9:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



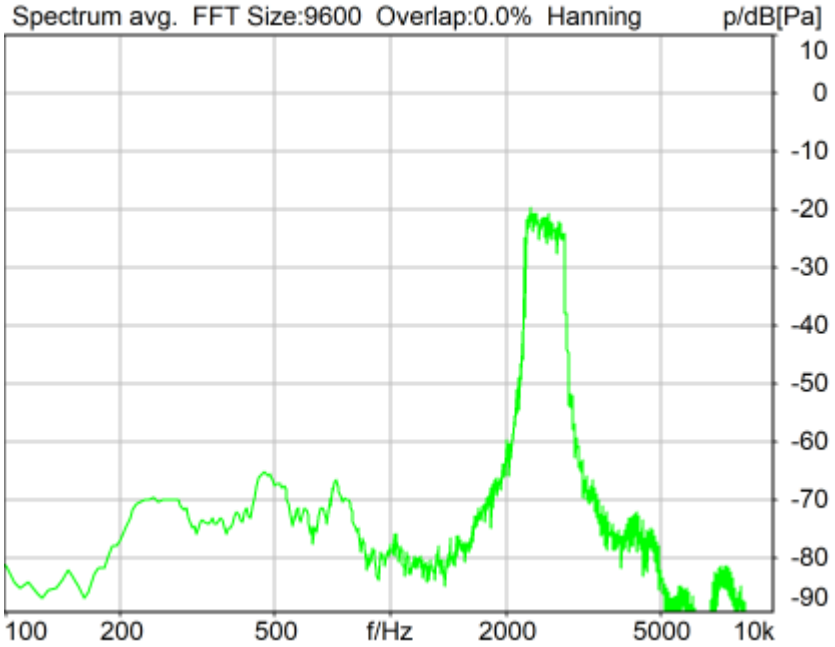
Distortion (Noise) RCV (packed): 22.88 dB (7.18%) Ok

Ok

2024/5/9 9:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



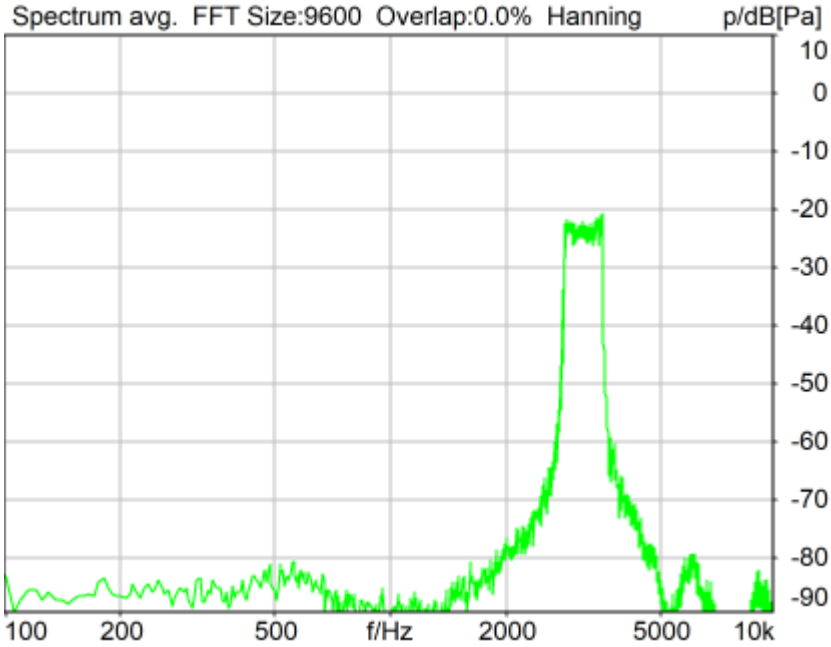
Distortion (Noise) RCV (packed): 28.42 dB (3.79%) Ok

Ok

2024/5/9 9:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



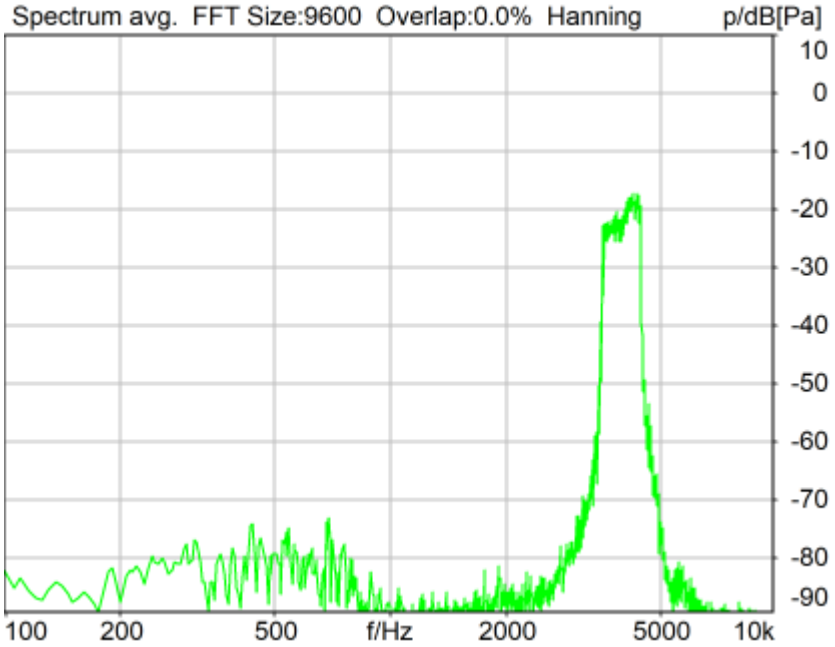
Distortion (Noise) RCV (packed): 32.99 dB (2.24%) Ok

Ok

2024/5/9 9:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



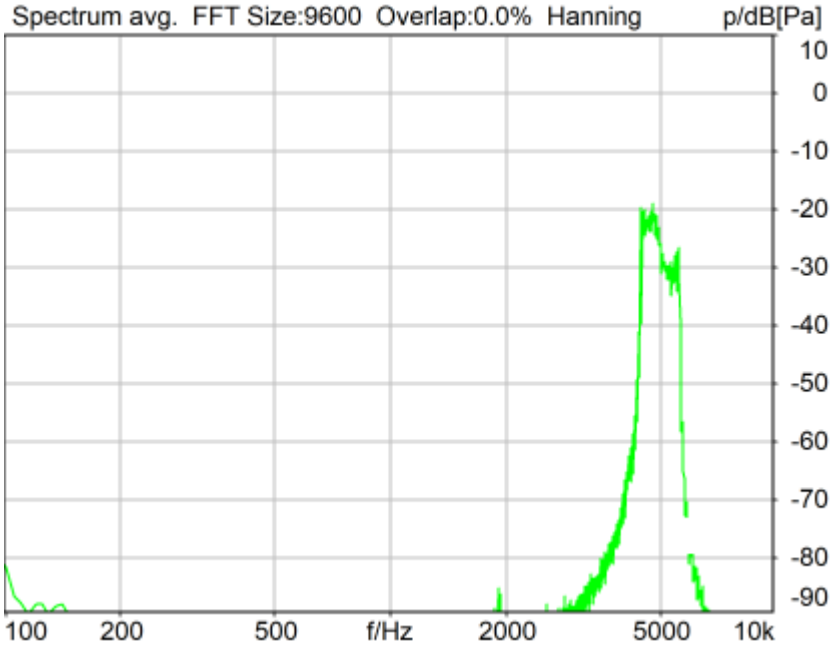
Distortion (Noise) RCV (packed): 35.41 dB (1.70%) Ok

Ok

2024/5/9 9:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



Distortion (Noise) RCV (packed): 33.12 dB (2.21%) Ok

Ok

2024/5/9 10:00 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N

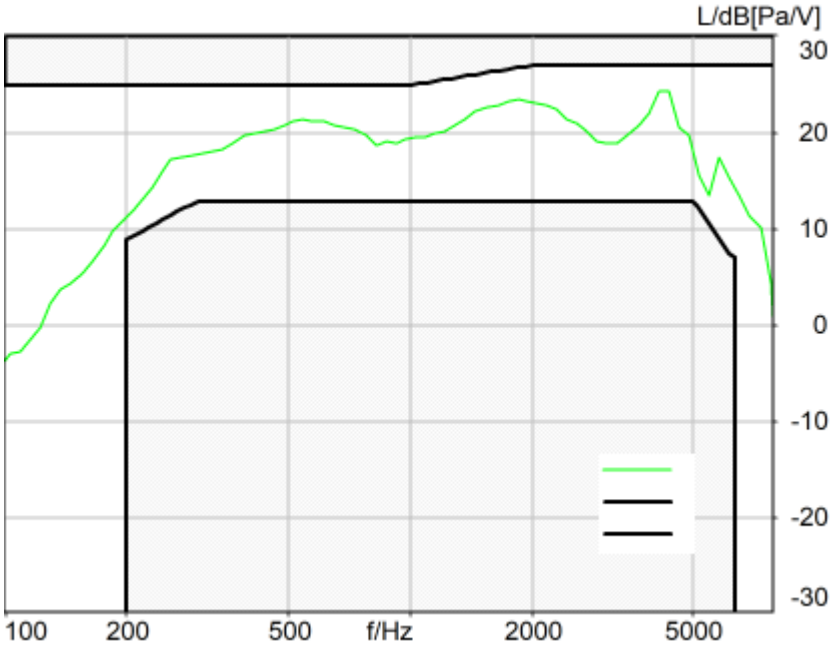
Region	Frequency	SDNR
1	250Hz	30.80 dB
2	315Hz	31.49 dB
3	400Hz	30.89 dB
4	500Hz	29.09 dB
5	630Hz	29.72 dB
6	800Hz	26.20 dB
7	1000Hz	28.75 dB
8	1250Hz	20.34 dB
9	1600Hz	24.77 dB
10	2000Hz	22.88 dB
11	2500Hz	28.42 dB
12	3150Hz	32.99 dB
13	4000Hz	35.41 dB
14	5000Hz	33.12 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 20.34dB at 1250Hz.

2024/5/9 10:00 ACQUA

5.3 Frequency Response 8N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



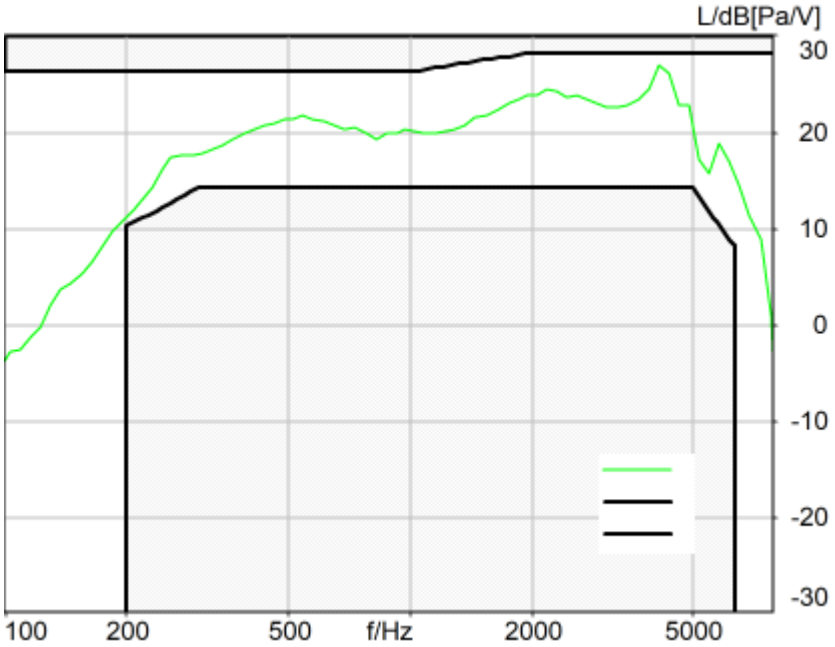
Absolute minimal distance
2.66 dB at 4369.4 Hz Ok

Ok

2024/5/8 17:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



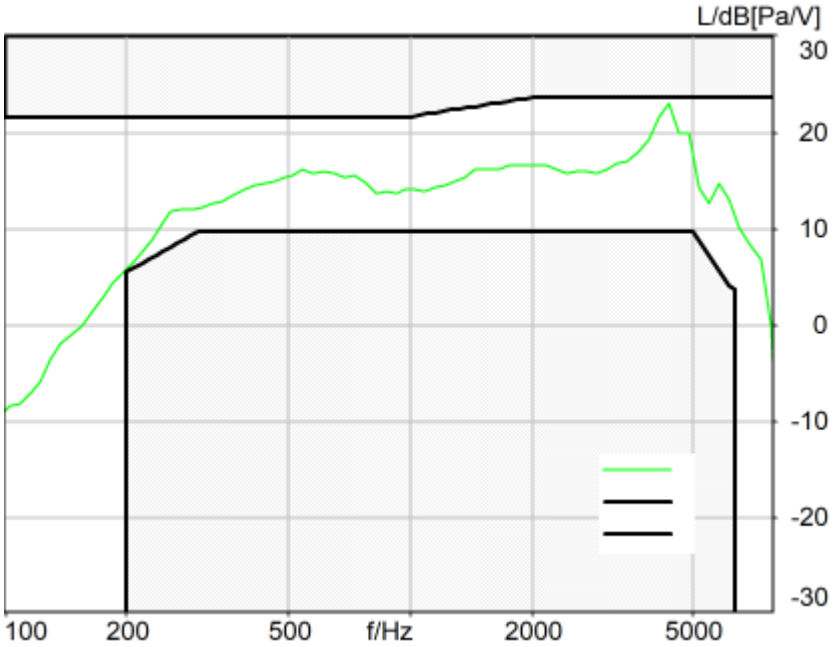
Absolute minimal distance
1.32 dB at 4119.5 Hz Ok

Ok

2024/5/8 17:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



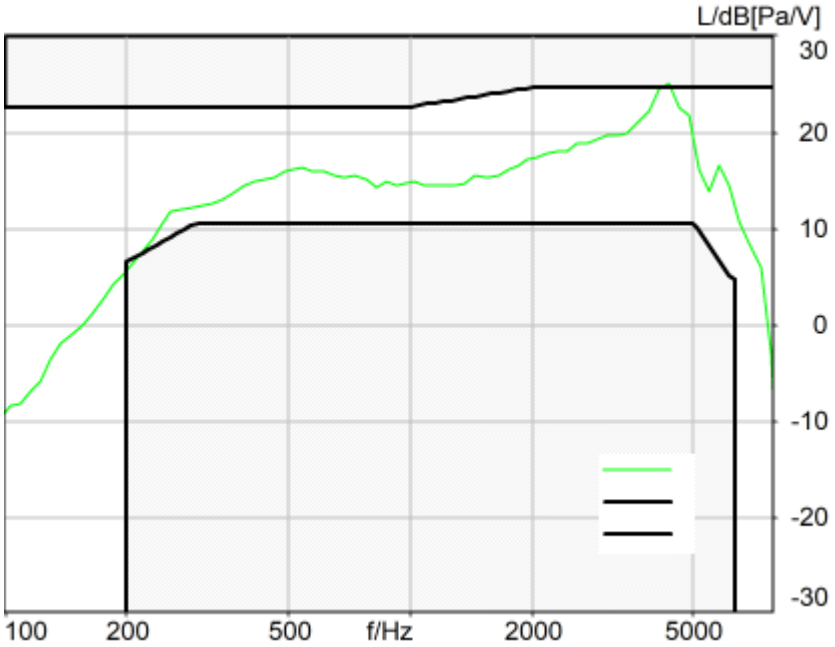
Absolute minimal distance
0.58 dB at 4369.4 Hz Ok

Ok

2024/5/9 10:00 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Absolute minimal distance
-0.50 dB at 4369.4 Hz Not Ok

Not Ok

2024/5/9 10:01 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

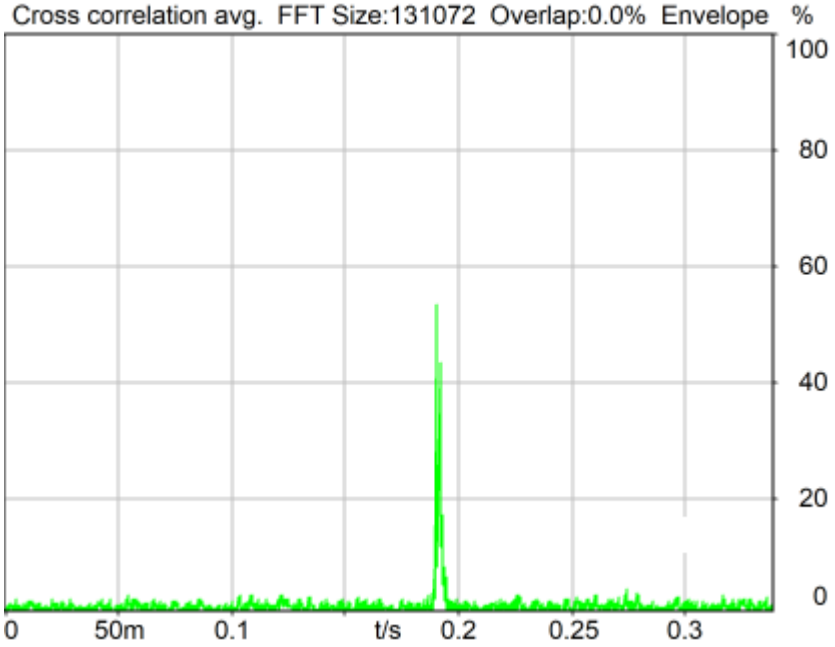
Measurement Object	WIFI 6G_802.11ax-HE20_EVS NB 24.4kbps_CH5
Description	HMD_TA_1600#Tomcat

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/22 12:31
Responsible Person	audio

Overall Receive Delay NB, Index: 1 3
5.1a Receive Volume Control Performance 8N NB, Index: 1 3
5.1b Receive Volume Control Performance 2N NB, Index: 1 4
5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1 5
5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1 6
5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1 7
5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1 7
5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1 8
5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1 9
5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1 9
5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1 10
5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1 11
5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1 11
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 12
5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1 13
5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1 13
5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1 14
5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1 15
5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1 15
5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1 16
5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1 17
5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1 17
5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1 18
5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1 19
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 19
5.3 Frequency Response 8N FF HANB, Index: 1 20
5.3 Frequency Response 8N DF HANB, Index: 1 21
5.3 Frequency Response 2N FF HANB, Index: 1 21
5.3 Frequency Response 2N DF HANB, Index: 1 22

Overall Receive Delay NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ Preparation - Delay measurement

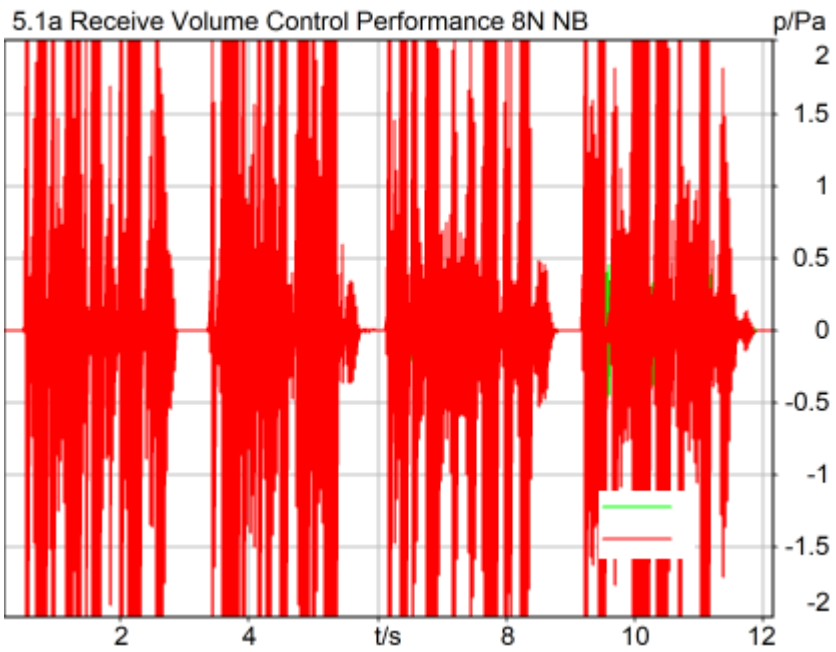


Channel	Delay
RCV*Source	191.2 ms

2024/5/21 13:30 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.1a Receive Volume Control Performance 8N NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Correction

X - 70

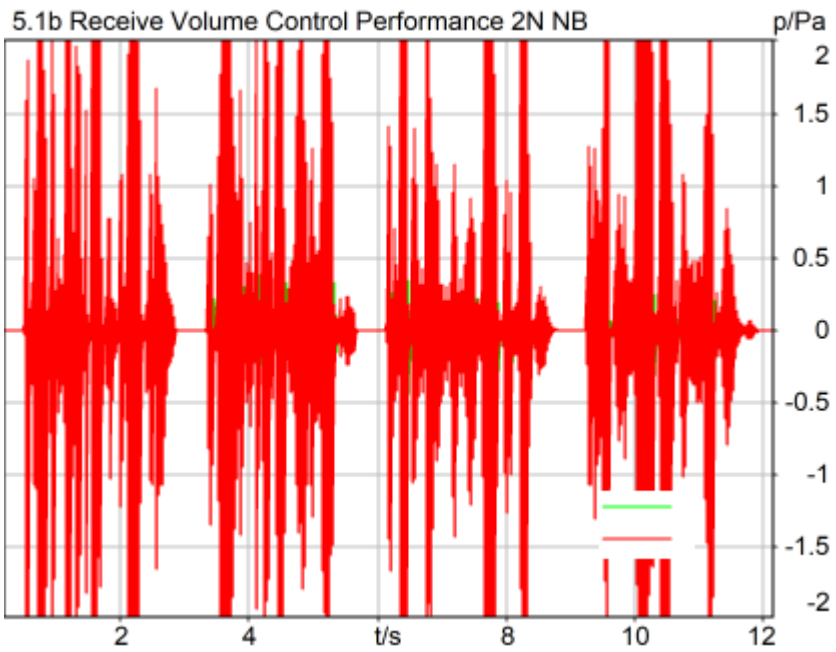
Channel	Speech level	Activity	Corrected speech level	
RCV	93.68 dB[SPL]	80.69%	23.68 dB[SPL]	Ok

Ok

2024/5/21 13:36 ACQUA 6.0.200

5.1b Receive Volume Control Performance 2N NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Correction

X - 70

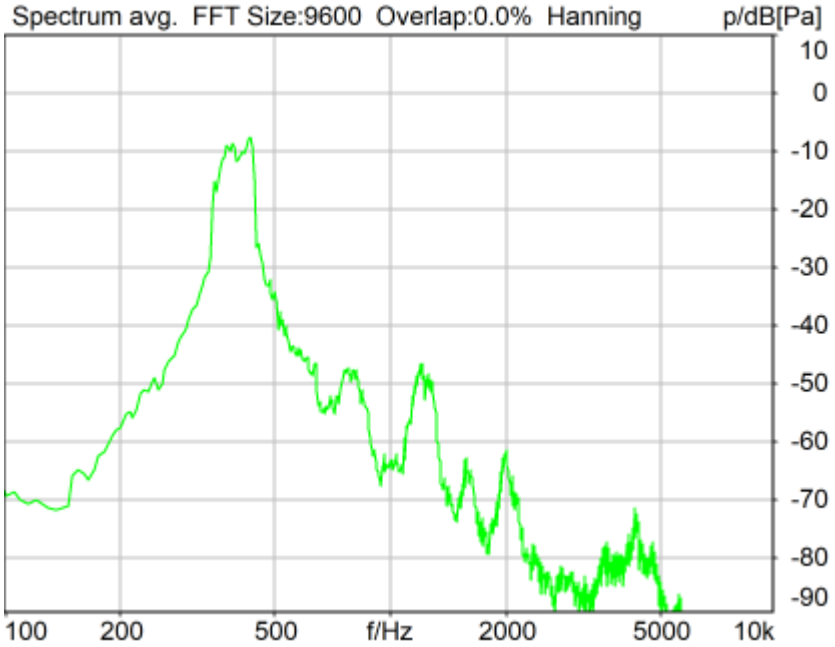
Channel	Speech level	Activity	Corrected speech level	
RCV	87.42 dB[SPL]	80.19%	17.42 dB[SPL]	Ok

Ok

2024/5/21 13:30 ACQUA 6.0.200

5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



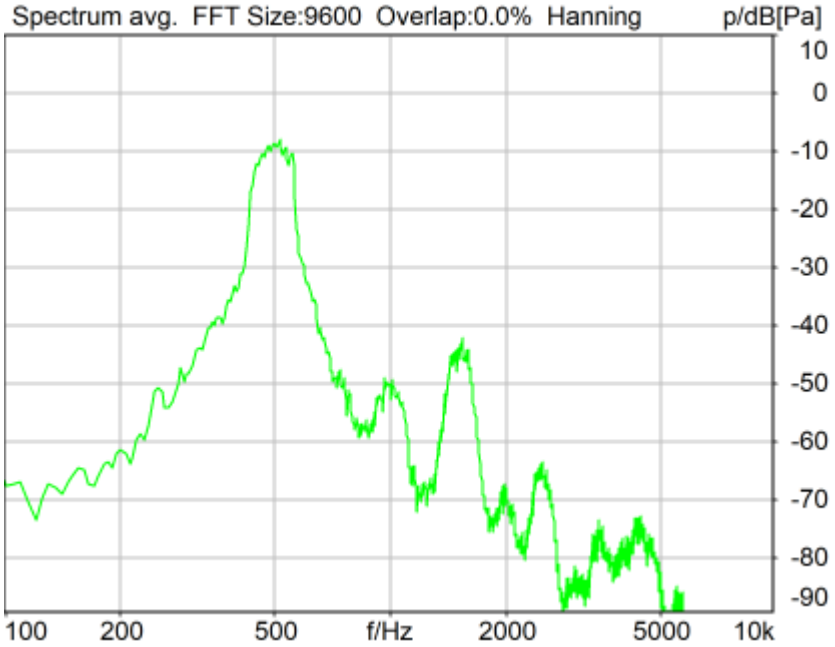
Distortion (Noise) RCV (packed): 28.70 dB (3.67%) Ok

Ok

2024/5/21 13:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



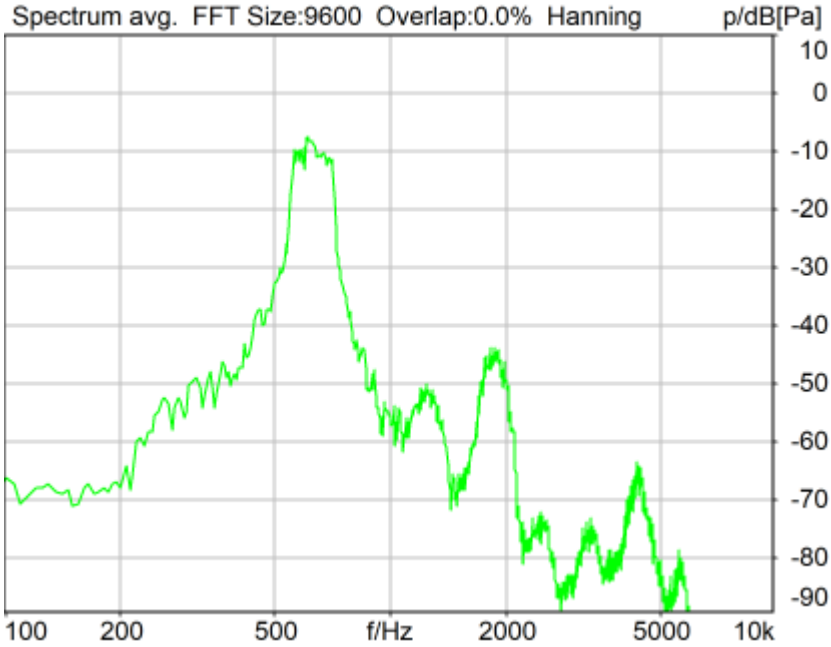
Distortion (Noise) RCV (packed): 26.25 dB (4.87%) Ok

Ok

2024/5/21 13:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



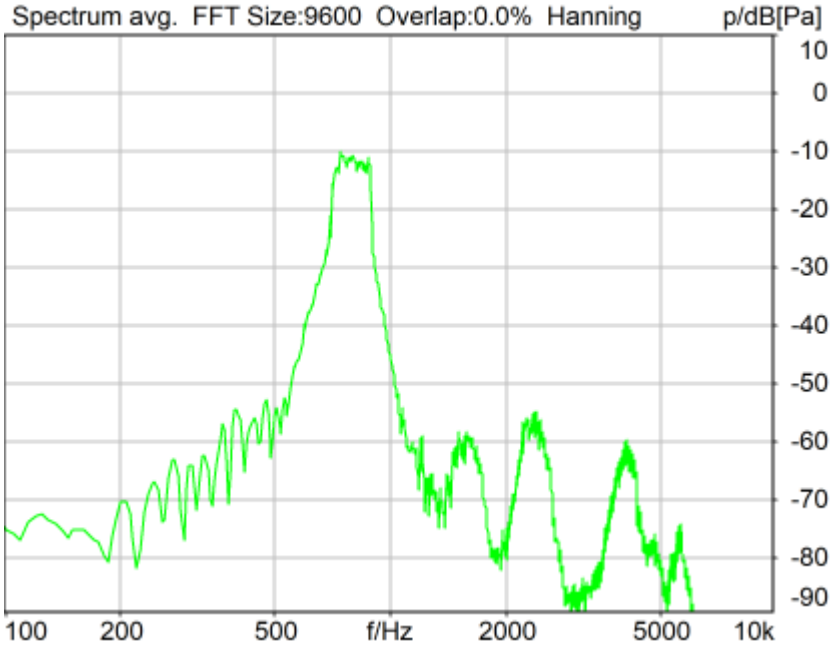
Distortion (Noise) RCV (packed): 26.59 dB (4.68%) Ok

Ok

2024/5/21 13:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



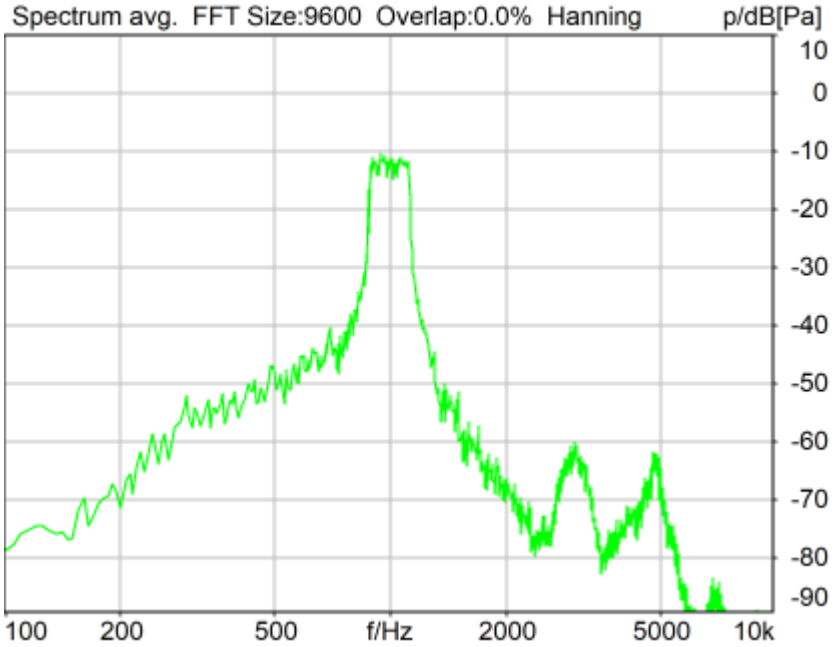
Distortion (Noise) RCV (packed): 25.54 dB (5.29%) Ok

Ok

2024/5/21 13:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



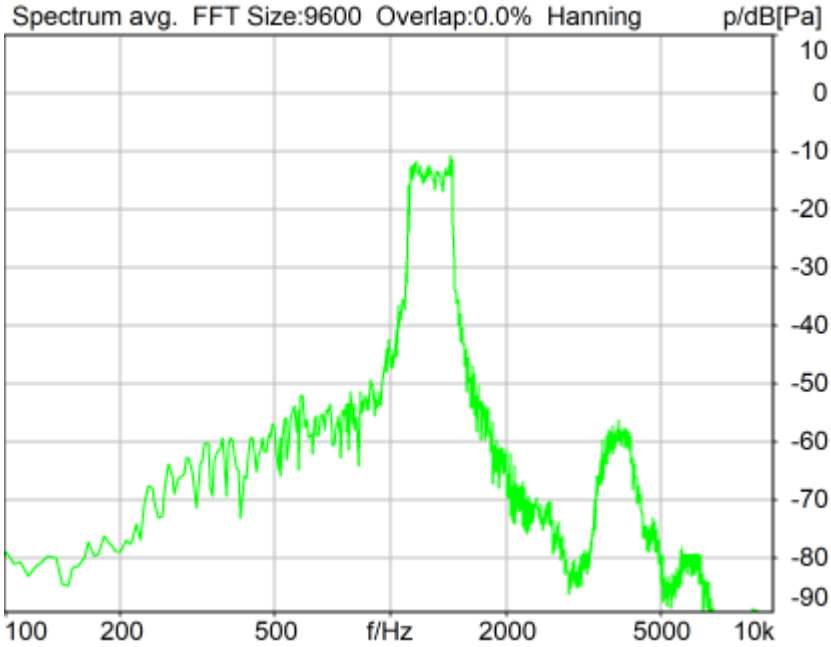
Distortion (Noise) RCV (packed): 25.70 dB (5.19%) Ok

Ok

2024/5/21 13:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



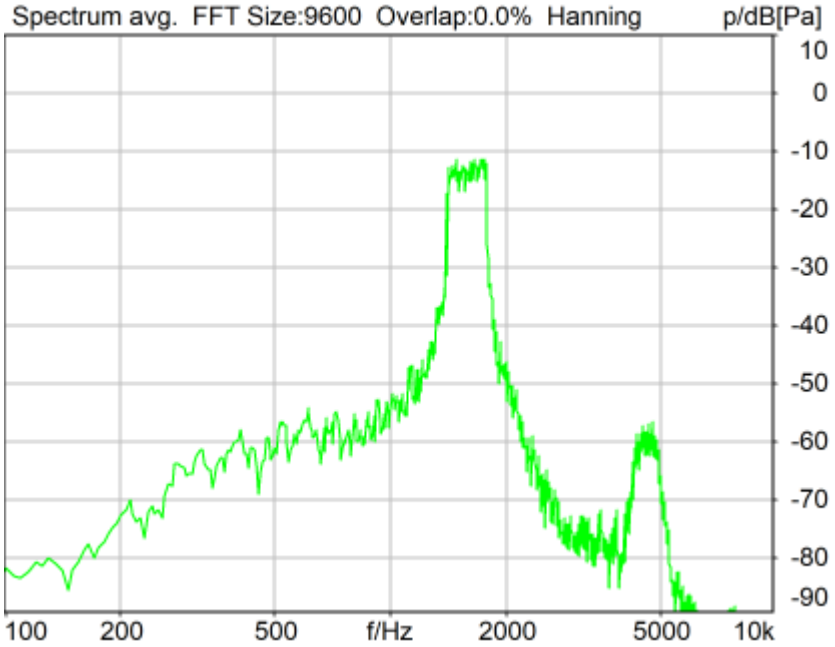
Distortion (Noise) RCV (packed): 22.72 dB (7.31%) Ok

Ok

2024/5/21 13:39 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



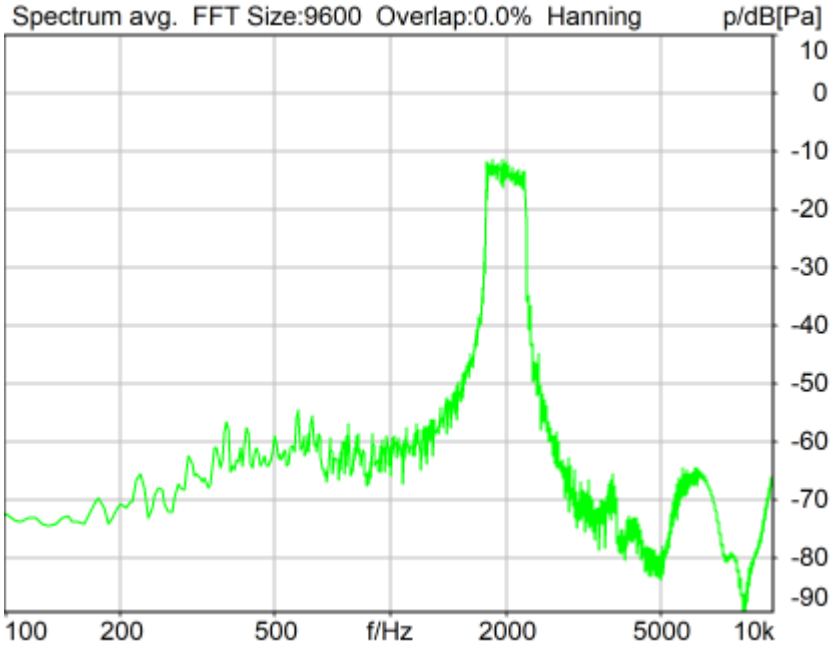
Distortion (Noise) RCV (packed): 26.96 dB (4.49%) Ok

Ok

2024/5/21 13:39 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



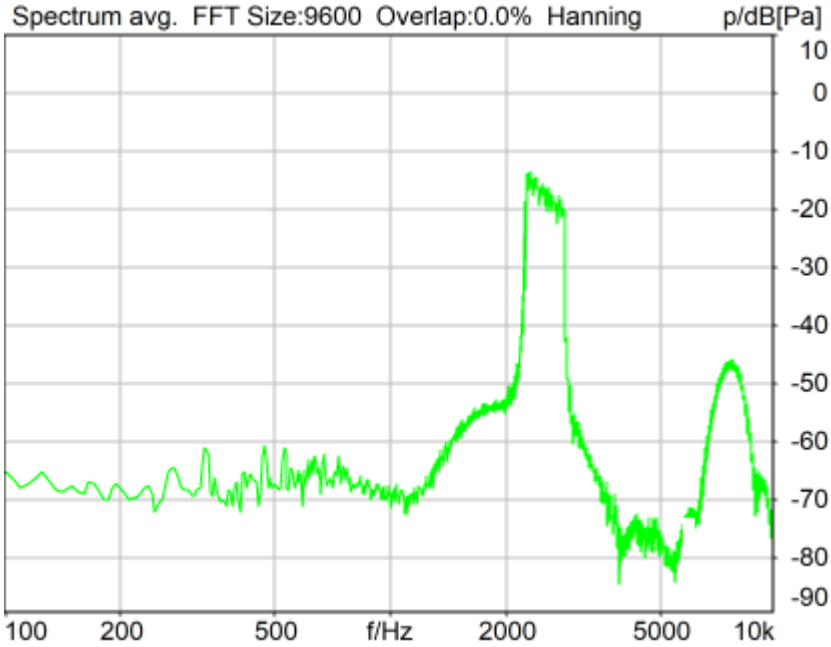
Distortion (Noise) RCV (packed): 28.02 dB (3.97%) Ok

Ok

2024/5/21 13:39 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



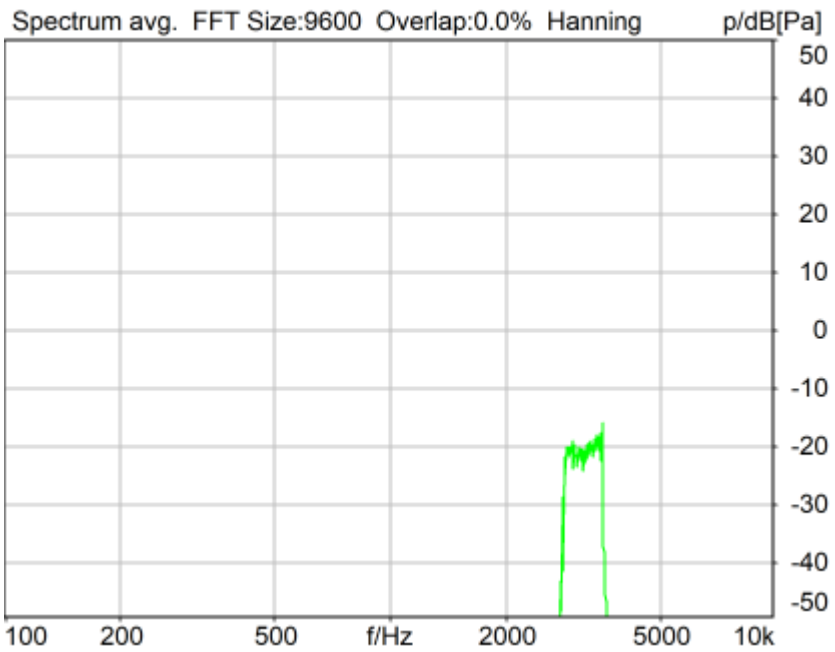
Distortion (Noise) RCV (packed): 25.84 dB (5.11%) Ok

Ok

2024/5/21 13:40 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 29.04 dB (3.53%) Ok

Ok

2024/5/21 13:40 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N

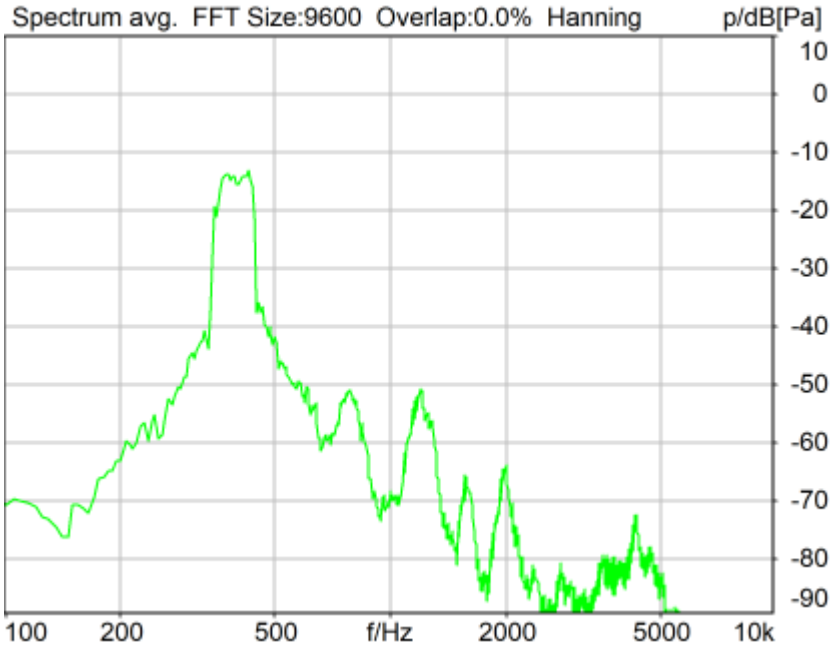
Region	Frequency	SDNR
1	400Hz	28.70 dB
2	500Hz	26.25 dB
3	630Hz	26.59 dB
4	800Hz	25.54 dB
5	1000Hz	25.70 dB
6	1250Hz	22.72 dB
7	1600Hz	26.96 dB
8	2000Hz	28.02 dB
9	2500Hz	25.84 dB
10	3150Hz	29.04 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.72dB at 1250Hz.

2024/5/21 13:40 ACQUA

5.2 RCV Distortion and Noise - 400 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



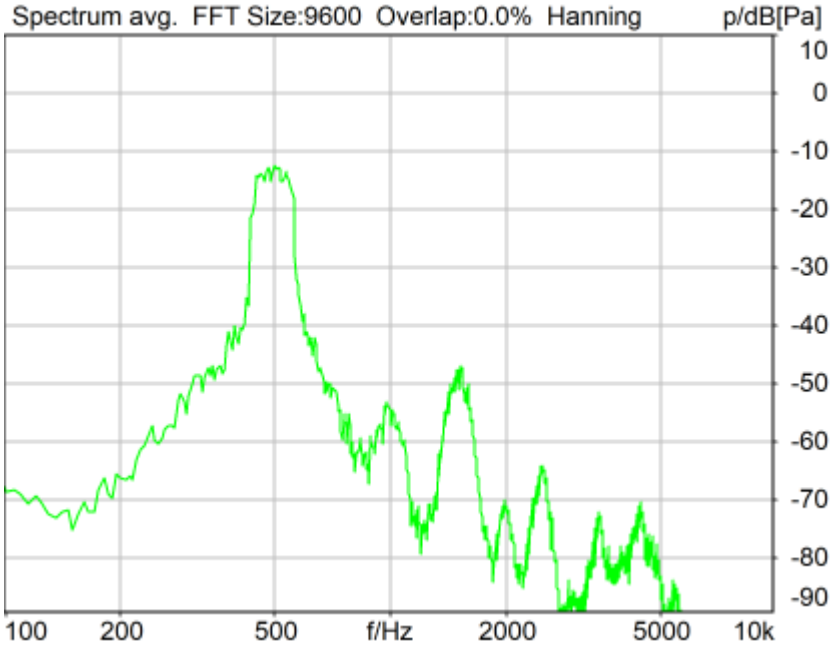
Distortion (Noise) RCV (packed): 29.94 dB (3.18%) Ok

Ok

2024/5/21 13:31 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



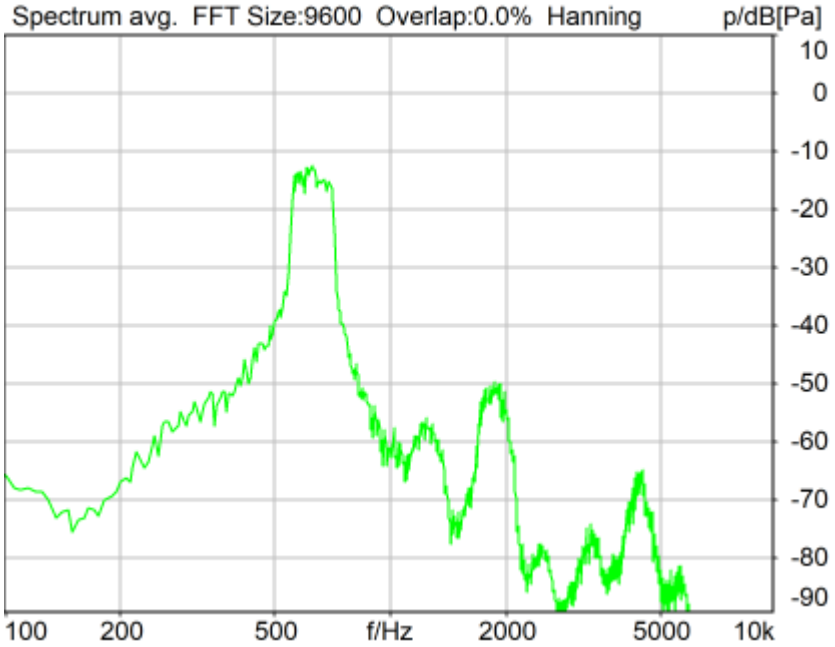
Distortion (Noise) RCV (packed): 28.62 dB (3.70%) Ok

Ok

2024/5/21 13:31 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



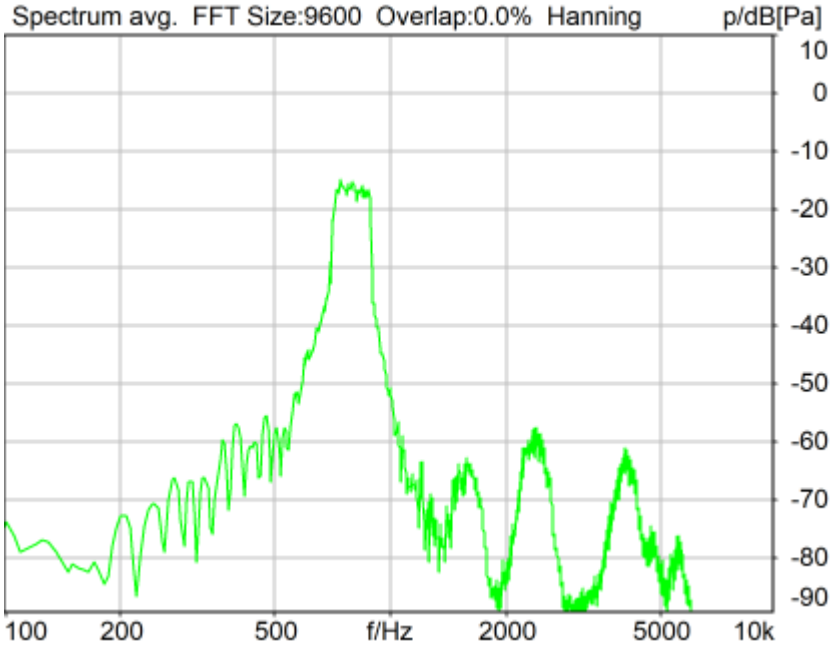
Distortion (Noise) RCV (packed): 27.82 dB (4.07%) Ok

Ok

2024/5/21 13:31 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



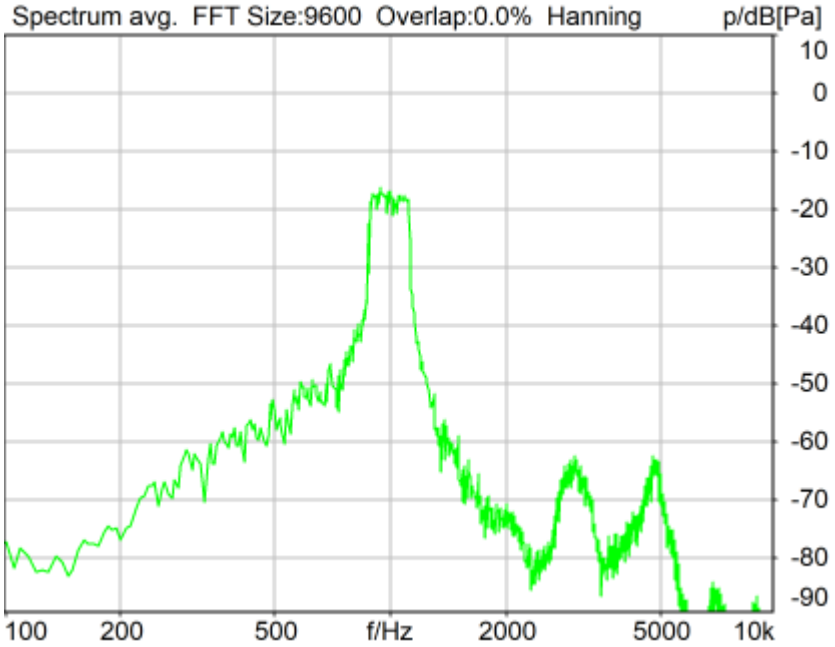
Distortion (Noise) RCV (packed): 27.98 dB (3.99%) Ok

Ok

2024/5/21 13:32 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



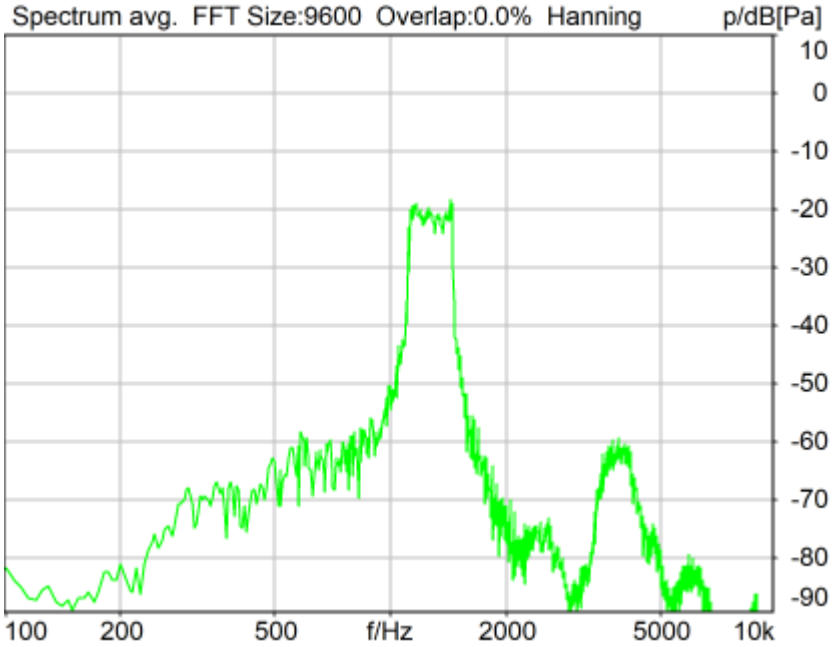
Distortion (Noise) RCV (packed): 25.99 dB (5.02%) Ok

Ok

2024/5/21 13:32 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



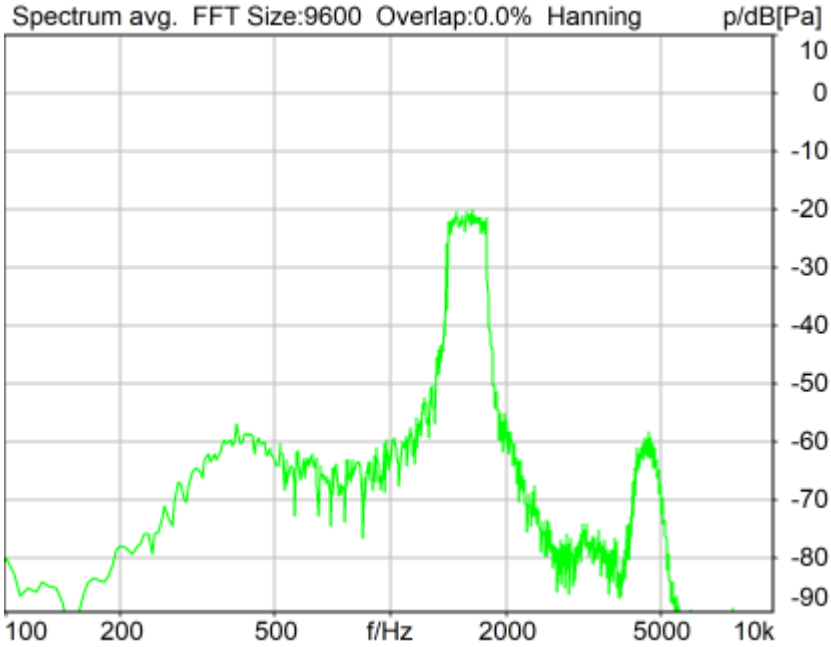
Distortion (Noise) RCV (packed): 22.84 dB (7.22%) Ok

Ok

2024/5/21 13:32 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



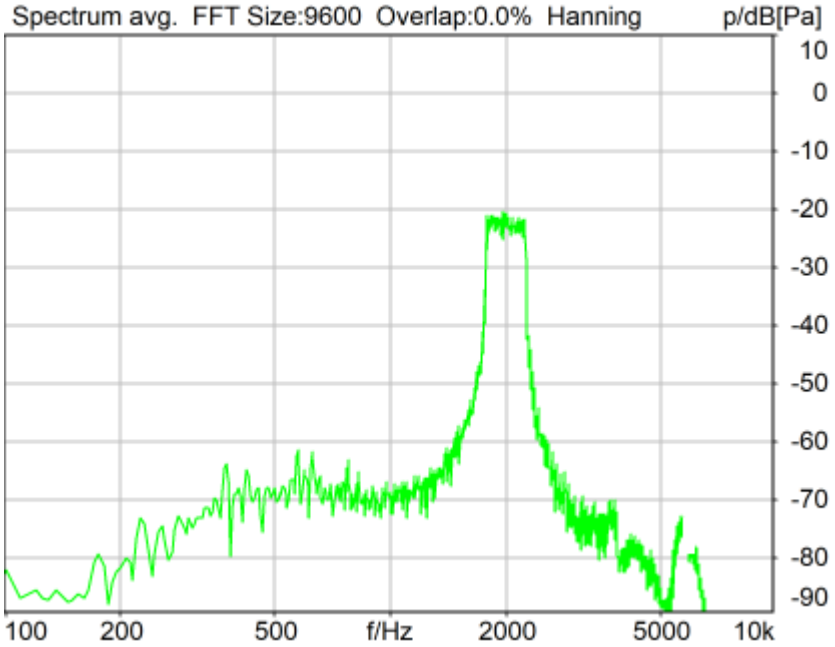
Distortion (Noise) RCV (packed): 26.31 dB (4.83%) Ok

Ok

2024/5/21 13:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



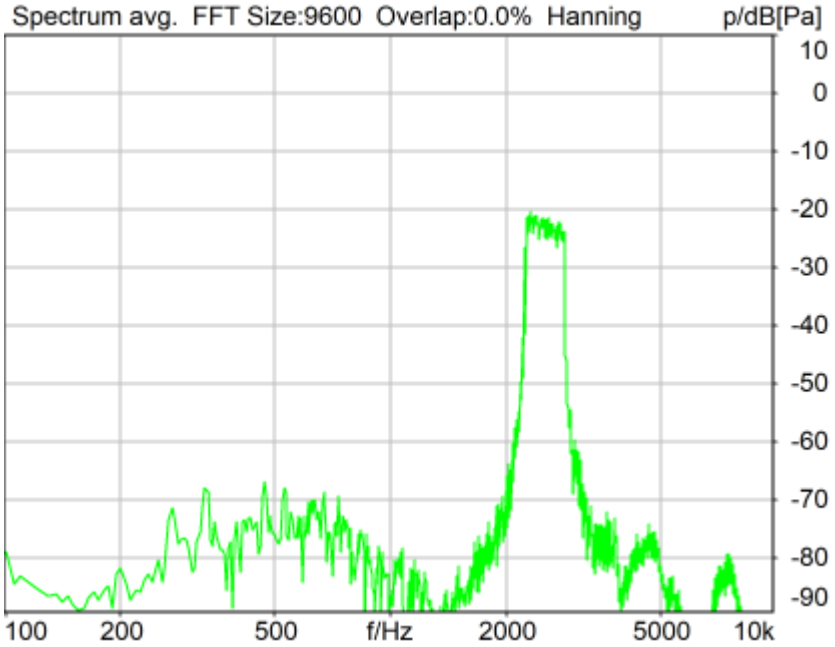
Distortion (Noise) RCV (packed): 26.96 dB (4.49%) Ok

Ok

2024/5/21 13:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



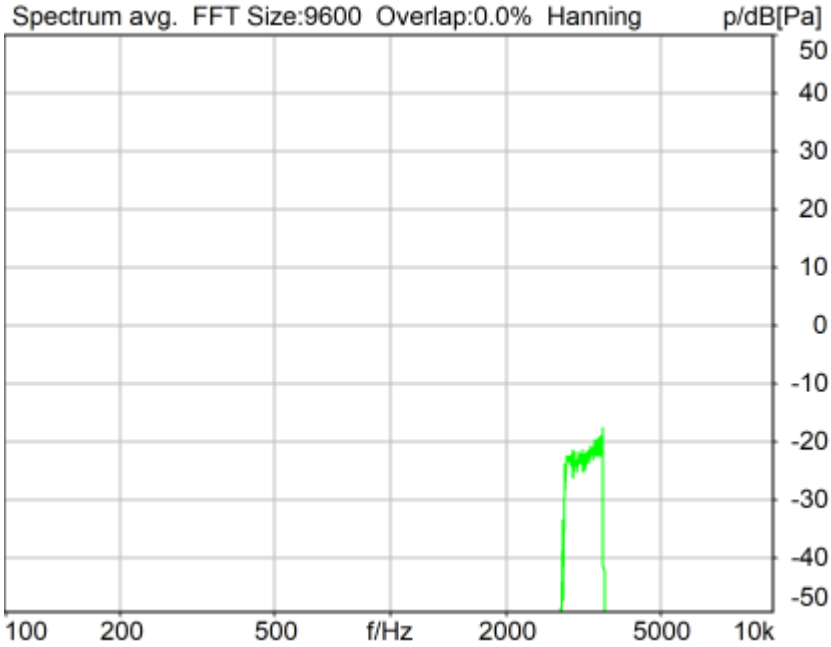
Distortion (Noise) RCV (packed): 33.37 dB (2.14%) Ok

Ok

2024/5/21 13:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz NB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N



Distortion (Noise) RCV (packed): 35.11 dB (1.76%) Ok

Ok

2024/5/21 13:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N

Region	Frequency	SDNR
1	400Hz	29.94 dB

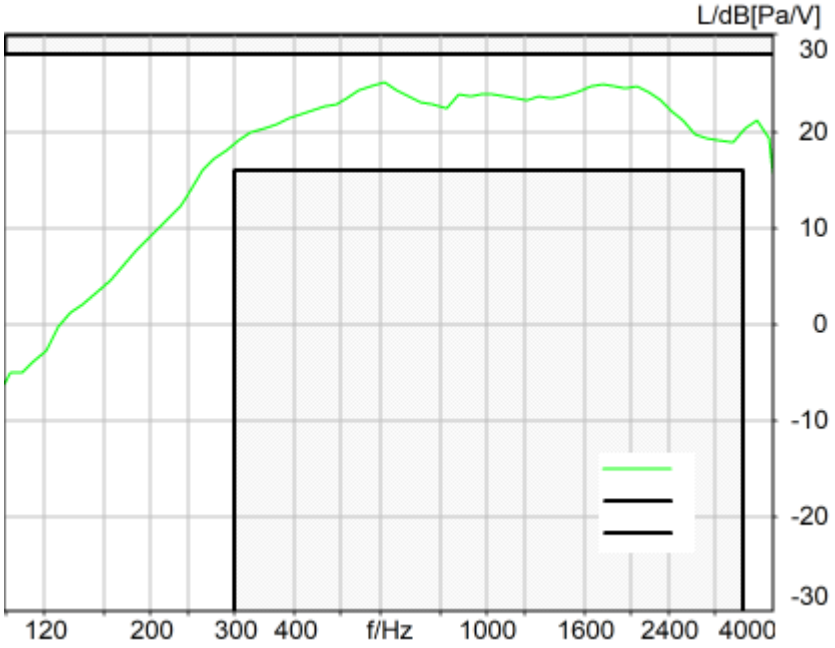
2	500Hz	28.62 dB
3	630Hz	27.82 dB
4	800Hz	27.98 dB
5	1000Hz	25.99 dB
6	1250Hz	22.84 dB
7	1600Hz	26.31 dB
8	2000Hz	26.96 dB
9	2500Hz	33.37 dB
10	3150Hz	35.11 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.84dB at 1250Hz.

2024/5/21 13:34 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



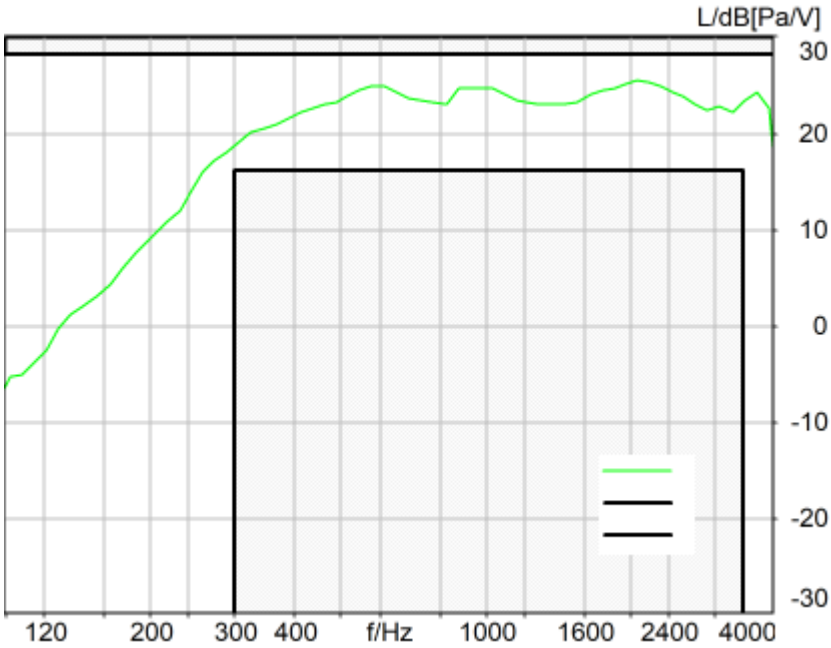
Absolute minimal distance
2.91 dB at 3245.6 Hz Ok

Ok

2024/5/21 13:41 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



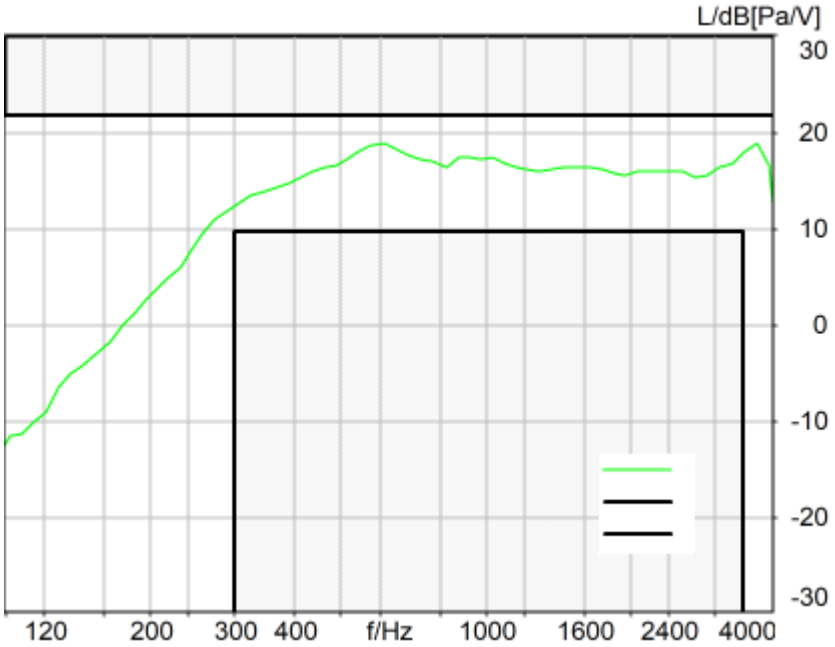
Absolute minimal distance
2.81 dB at 2057.5 Hz Ok

Ok

2024/5/21 13:41 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



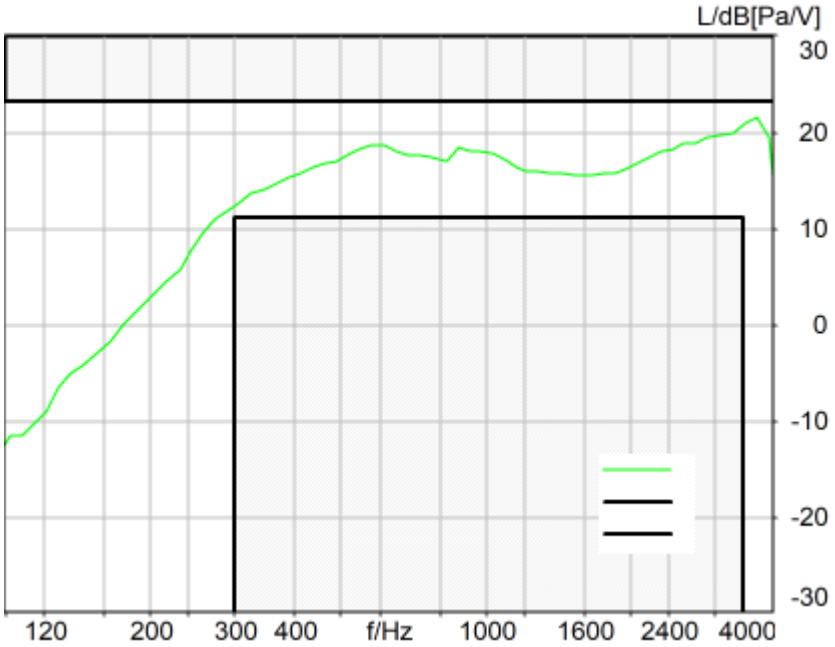
Absolute minimal distance
2.88 dB at 3657.5 Hz Ok

Ok

2024/5/21 13:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Narrowband



Absolute minimal distance
1.53 dB at 305.9 Hz Ok

Ok

2024/5/21 13:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

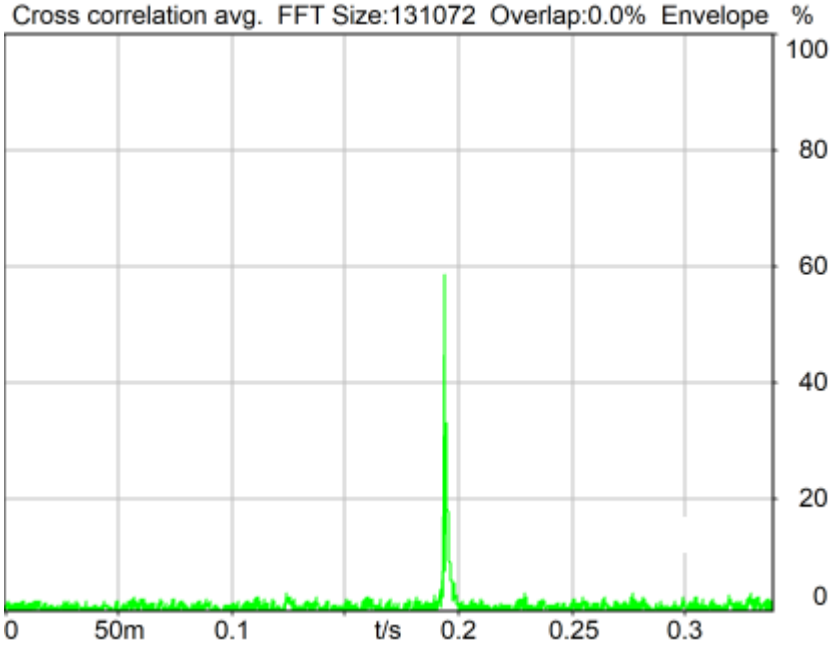
Measurement Object	WIFI 6G_802.11ax-HE20_EVS WB 24.4kbps_CH5
Description	HMD_TA_1600#Tomcat

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/22 12:31
Responsible Person	audio

Overall Receive Delay WB, Index: 1 3
5.1a Receive Volume Control Performance 8N WB, Index: 1 3
5.1b Receive Volume Control Performance 2N WB, Index: 1 4
5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1 5
5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 6
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 8
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1 10
5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1 11
5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1 11
5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1 12
5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1 13
5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1 13
5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1 14
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 15
5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1 15
5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 16
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 17
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 17
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 18
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 19
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 19
5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1 20
5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1 21
5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1 21
5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1 22
5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1 23
5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1 23
5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1 24
Report - Receive Distortion and Noise (Conversational Gain), Index: 1 25
5.3 Frequency Response 8N FF, Index: 1 25
5.3 Frequency Response 8N DF, Index: 1 26
5.3 Frequency Response 2N FF, Index: 1 27
5.3 Frequency Response 2N DF, Index: 1 28

Overall Receive Delay WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement

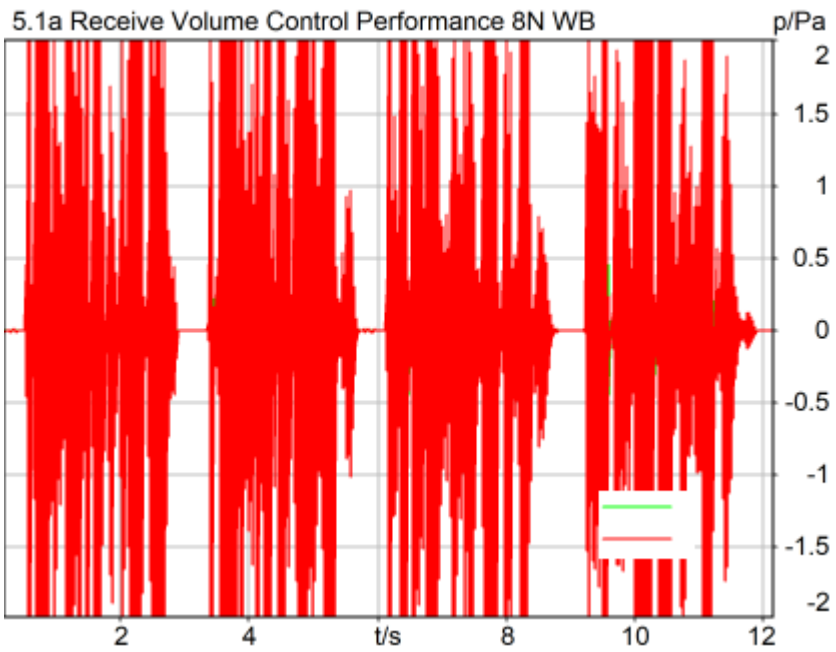


Channel	Delay
RCV*Source	194.1 ms

2024/5/21 13:44 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.1a Receive Volume Control Performance 8N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

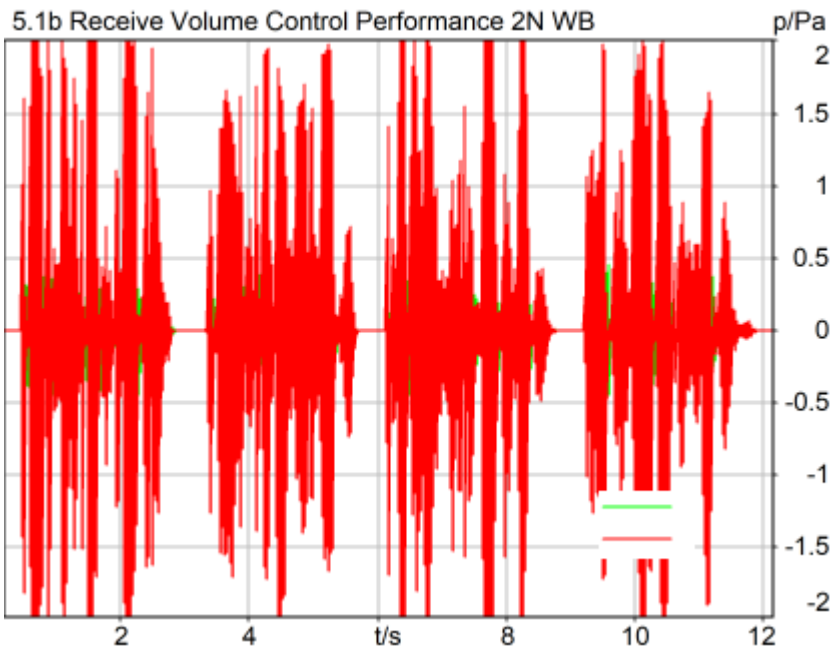
Channel	Speech level	Activity	Corrected speech level	
RCV	91.80 dB[SPL]	84.39%	21.80 dB[SPL]	Ok

Ok

2024/5/21 13:44 ACQUA 6.0.200

5.1b Receive Volume Control Performance 2N WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Correction

X - 70

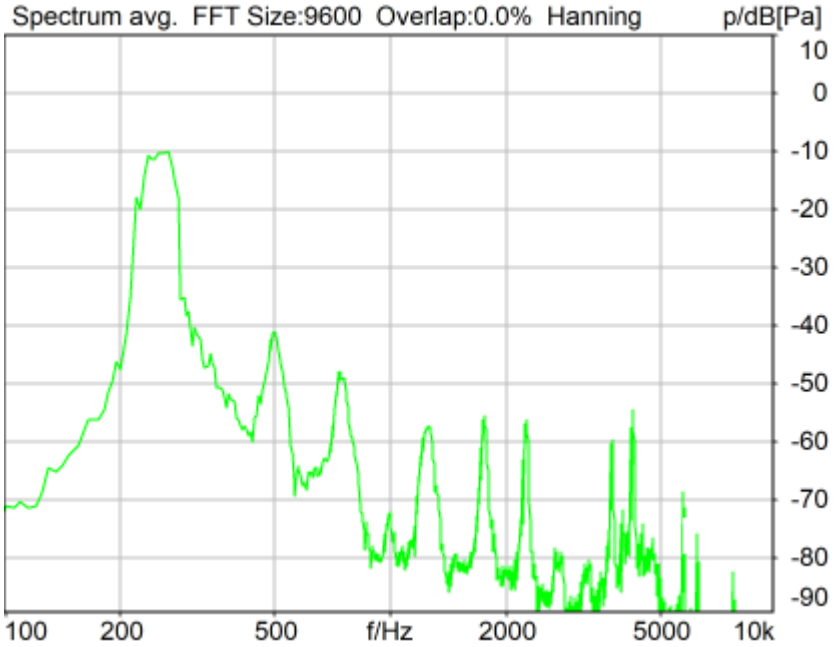
Channel	Speech level	Activity	Corrected speech level	
RCV	85.57 dB[SPL]	84.44%	15.57 dB[SPL]	Ok

Ok

2024/5/21 13:55 ACQUA 6.0.200

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



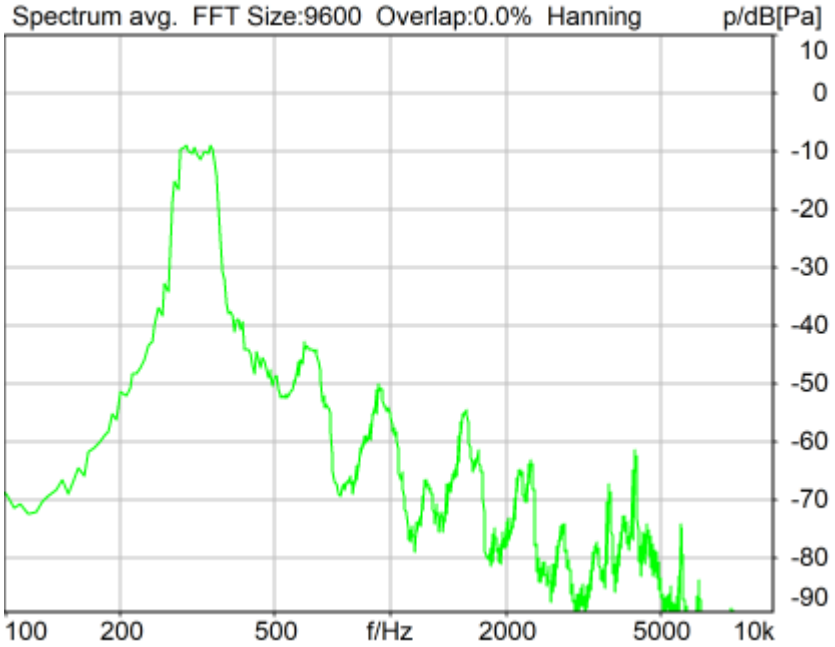
Distortion (Noise) RCV (packed): 31.38 dB (2.70%) Ok

Ok

2024/5/21 13:44 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



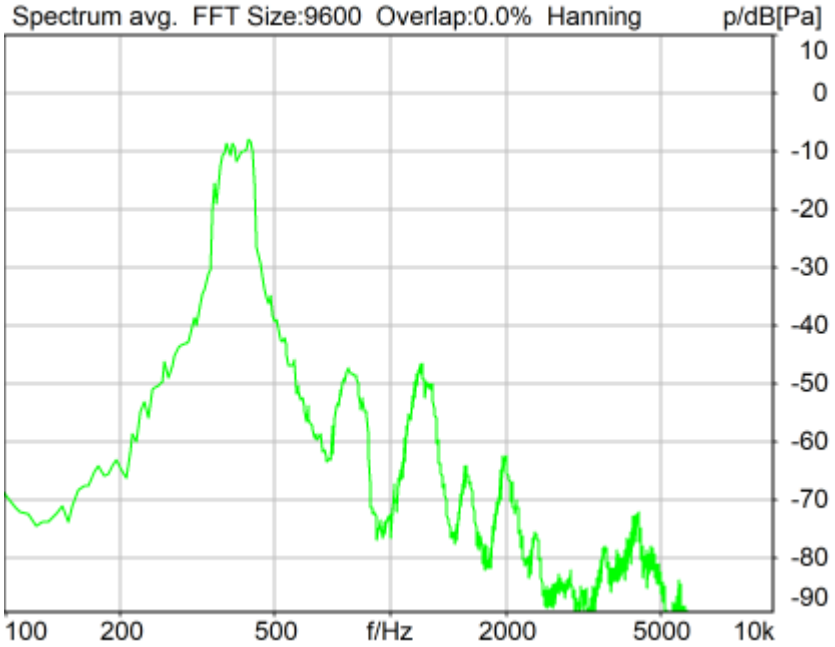
Distortion (Noise) RCV (packed): 31.62 dB (2.62%) Ok

Ok

2024/5/21 13:45 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



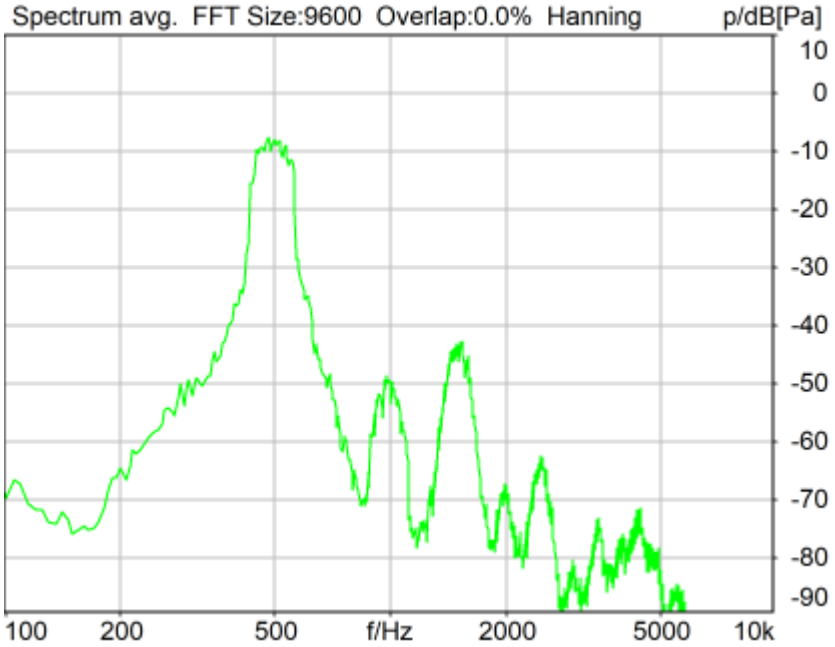
Distortion (Noise) RCV (packed): 30.73 dB (2.91%) Ok

Ok

2024/5/21 13:45 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



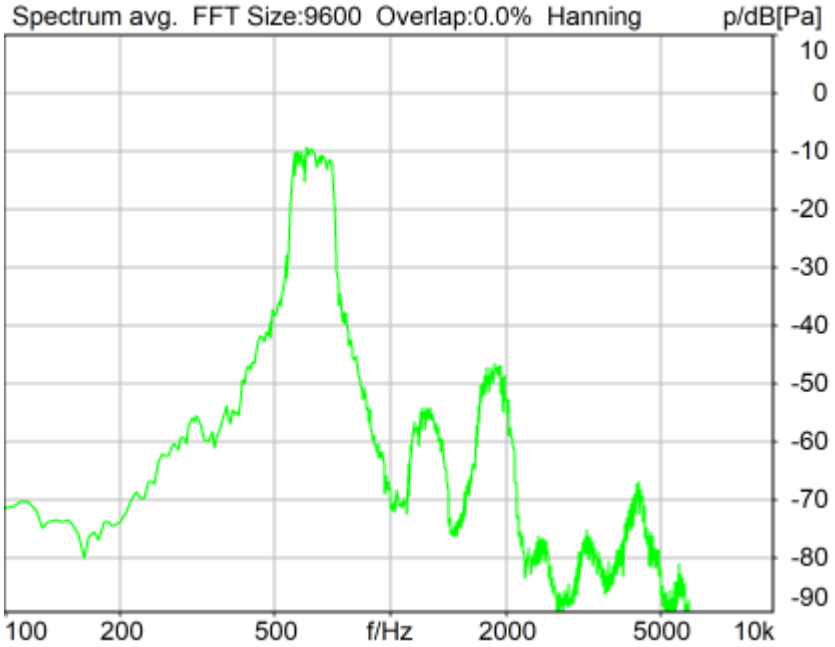
Distortion (Noise) RCV (packed): 28.98 dB (3.56%) Ok

Ok

2024/5/21 13:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



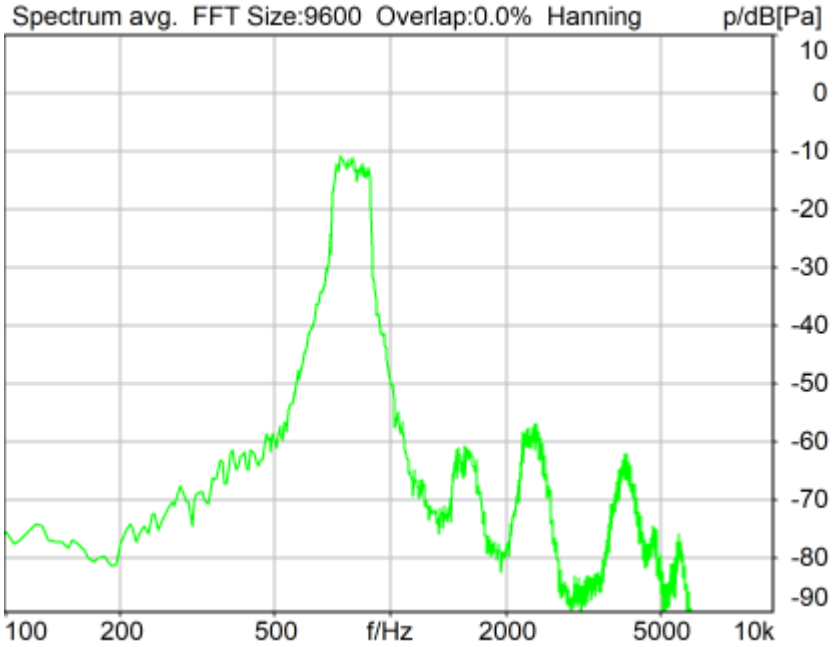
Distortion (Noise) RCV (packed): 29.30 dB (3.43%) Ok

Ok

2024/5/21 13:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



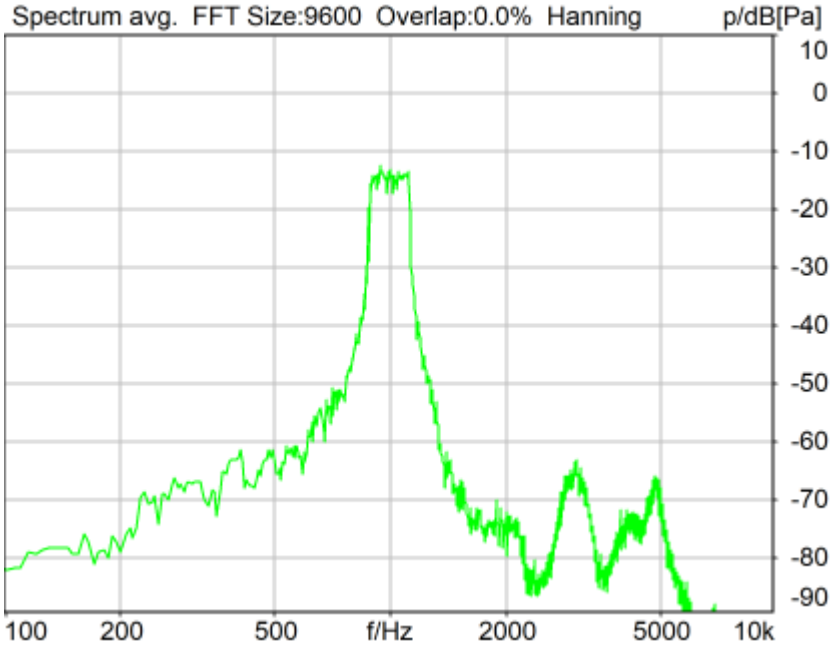
Distortion (Noise) RCV (packed): 28.46 dB (3.78%) Ok

Ok

2024/5/21 13:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



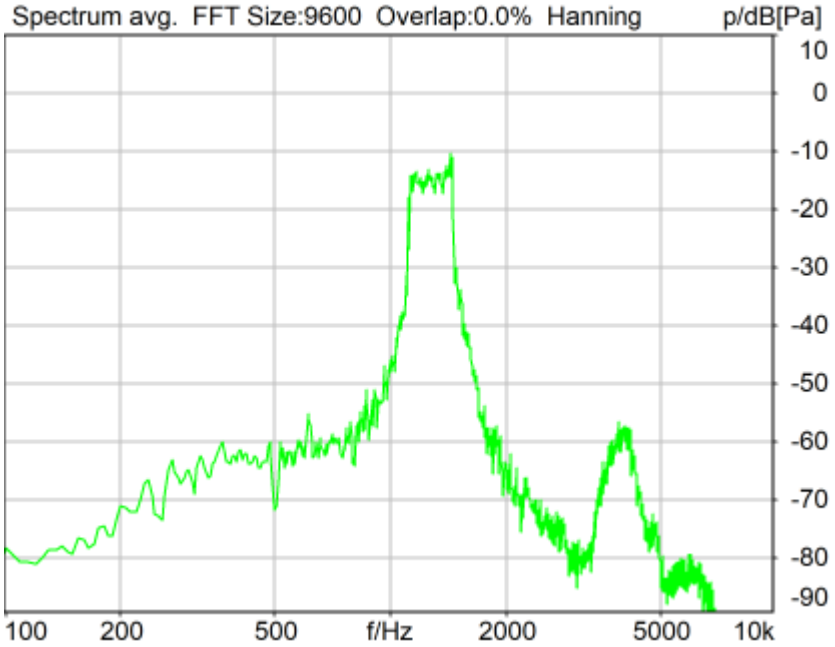
Distortion (Noise) RCV (packed): 29.30 dB (3.43%) Ok

Ok

2024/5/21 13:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



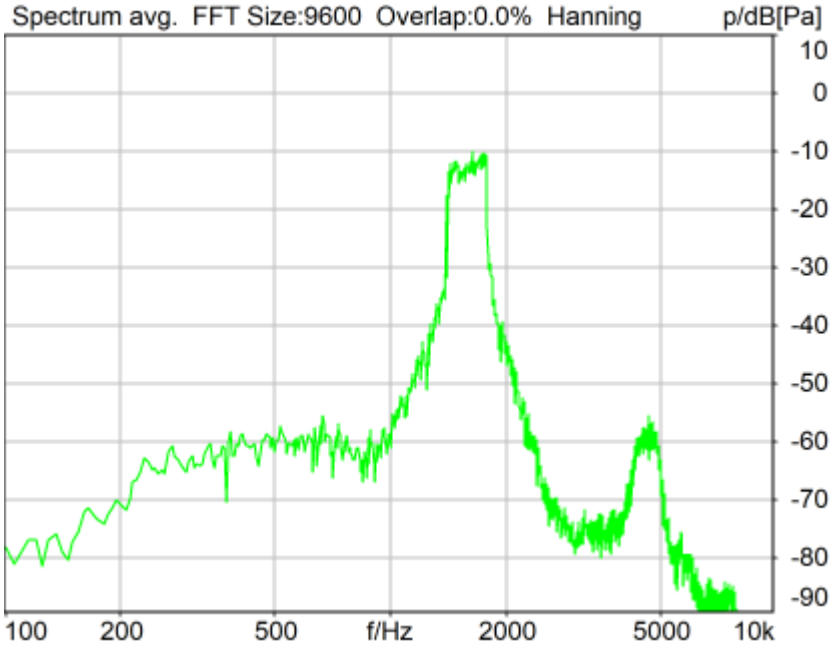
Distortion (Noise) RCV (packed): 20.71 dB (9.22%) Ok

Ok

2024/5/21 13:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



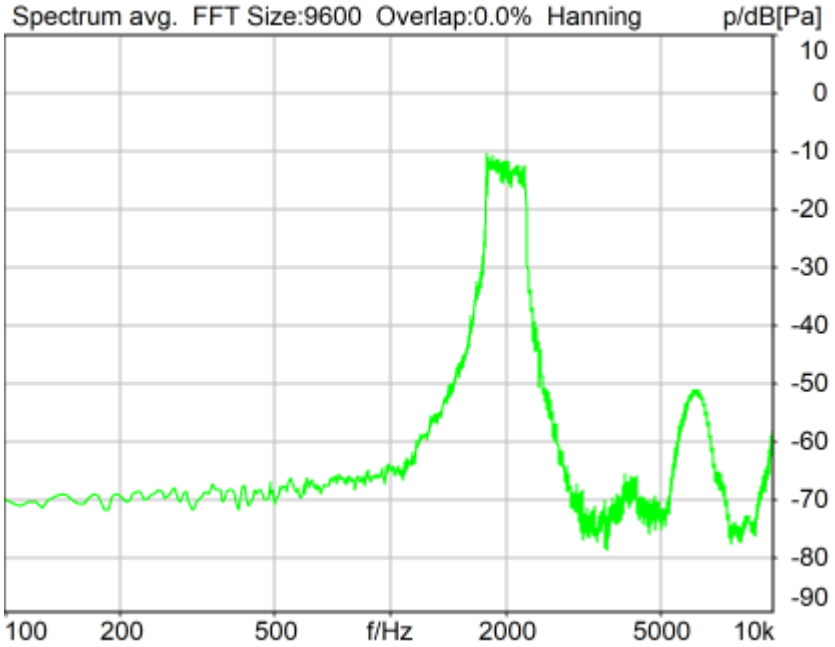
Distortion (Noise) RCV (packed): 24.55 dB (5.92%) Ok

Ok

2024/5/21 13:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



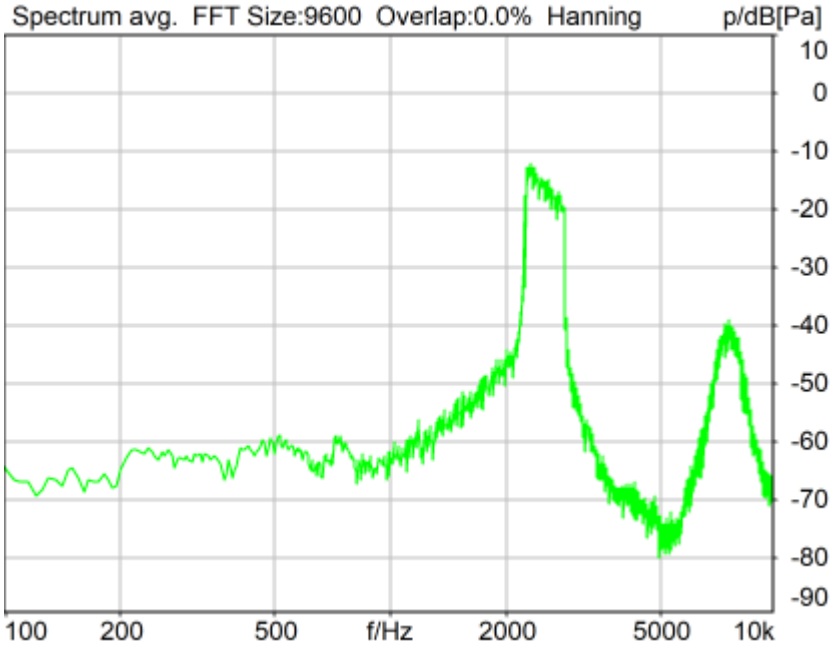
Distortion (Noise) RCV (packed): 23.15 dB (6.96%) Ok

Ok

2024/5/21 13:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



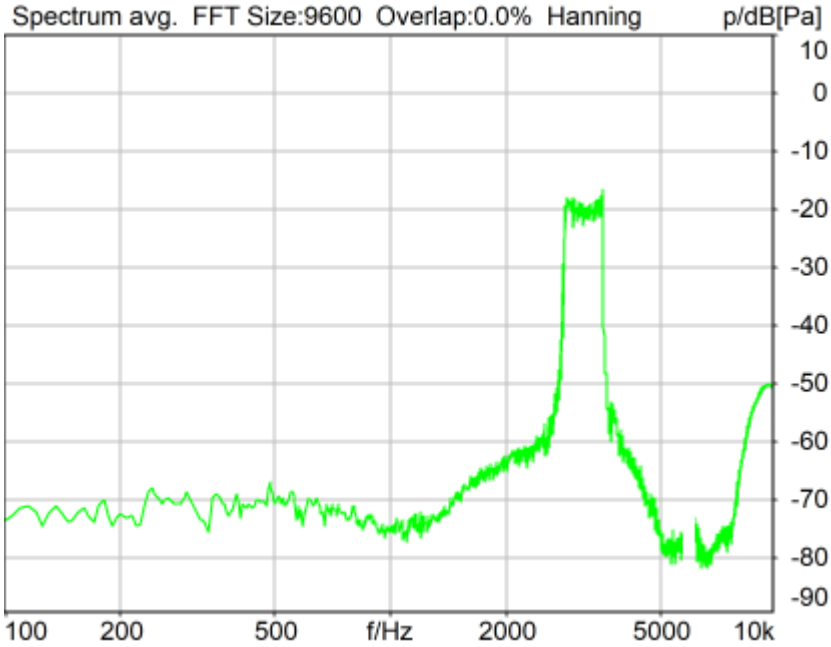
Distortion (Noise) RCV (packed): 21.99 dB (7.95%) Ok

Ok

2024/5/21 13:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



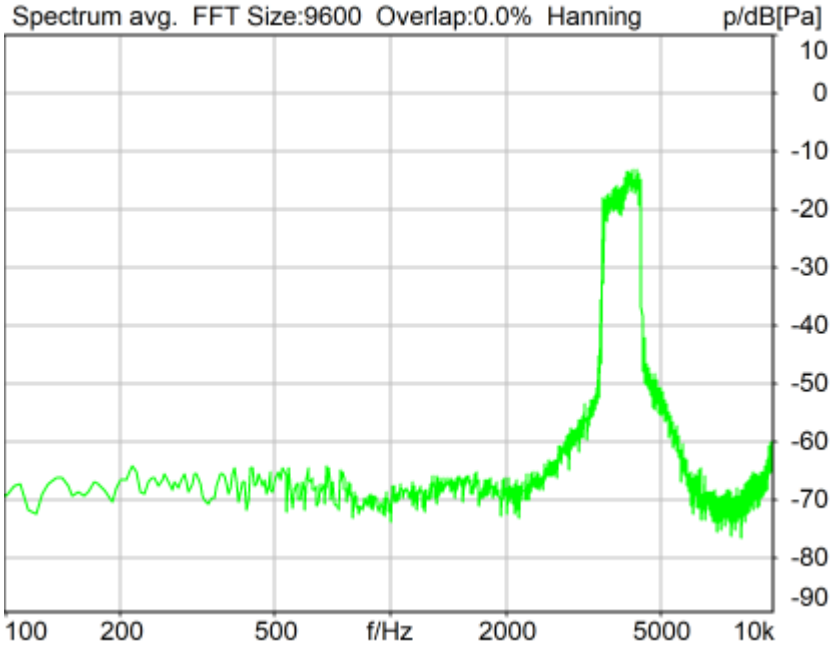
Distortion (Noise) RCV (packed): 27.08 dB (4.43%) Ok

Ok

2024/5/21 13:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



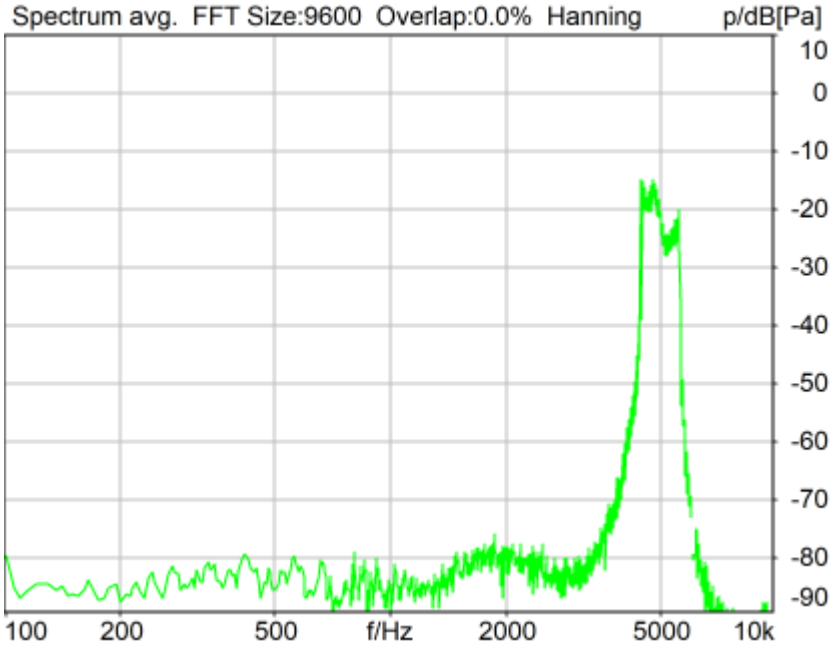
Distortion (Noise) RCV (packed): 25.86 dB (5.09%) Ok

Ok

2024/5/21 13:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 33.77 dB (2.05%) Ok

Ok

2024/5/21 13:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N

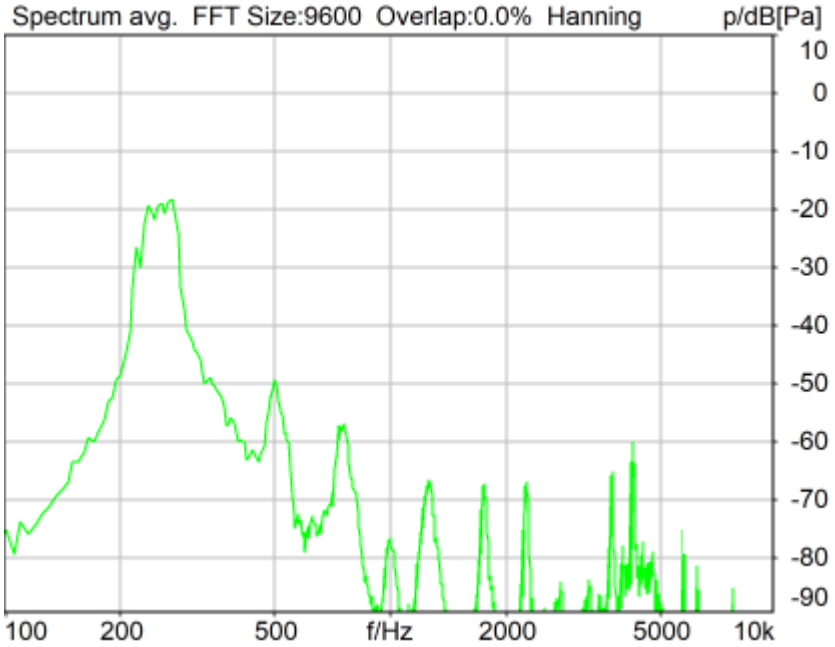
Region	Frequency	SDNR
1	250Hz	31.38 dB
2	315Hz	31.62 dB
3	400Hz	30.73 dB
4	500Hz	28.98 dB
5	630Hz	29.30 dB
6	800Hz	28.46 dB
7	1000Hz	29.30 dB
8	1250Hz	20.71 dB
9	1600Hz	24.55 dB
10	2000Hz	23.15 dB
11	2500Hz	21.99 dB
12	3150Hz	27.08 dB
13	4000Hz	25.86 dB
14	5000Hz	33.77 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 20.71dB at 1250Hz.

2024/5/21 13:53 ACQUA

5.2 RCV Distortion and Noise - 250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



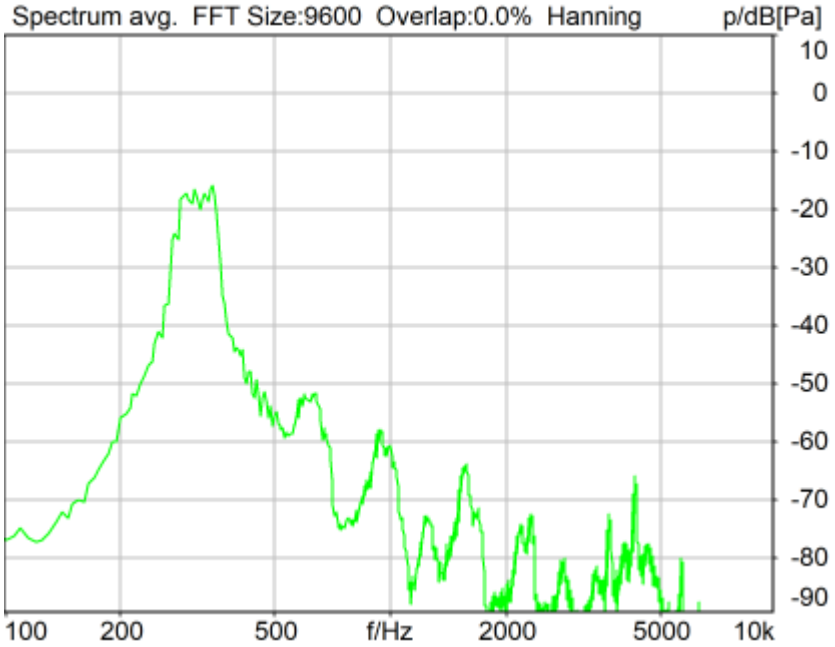
Distortion (Noise) RCV (packed): 30.22 dB (3.08%) Ok

Ok

2024/5/21 13:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



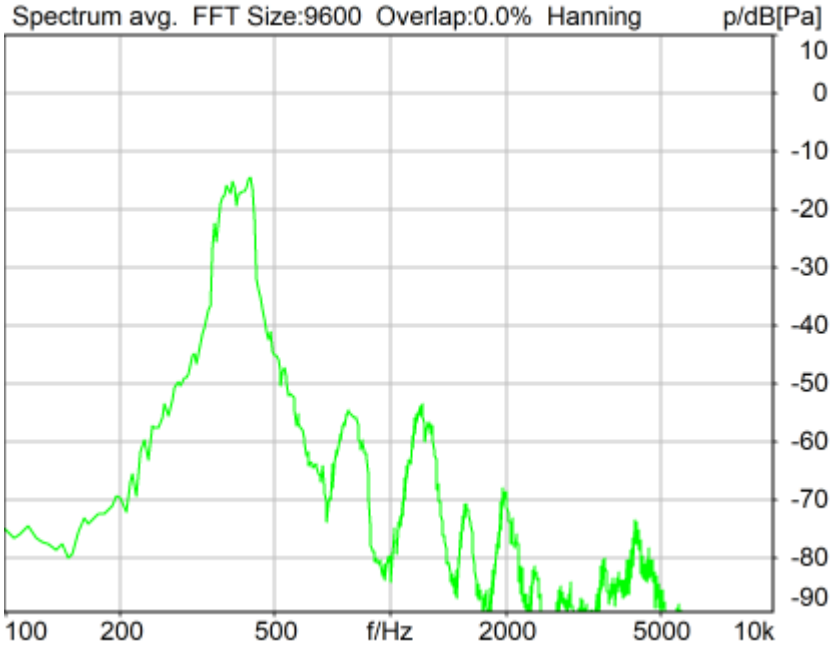
Distortion (Noise) RCV (packed): 30.46 dB (3.00%) Ok

Ok

2024/5/21 13:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



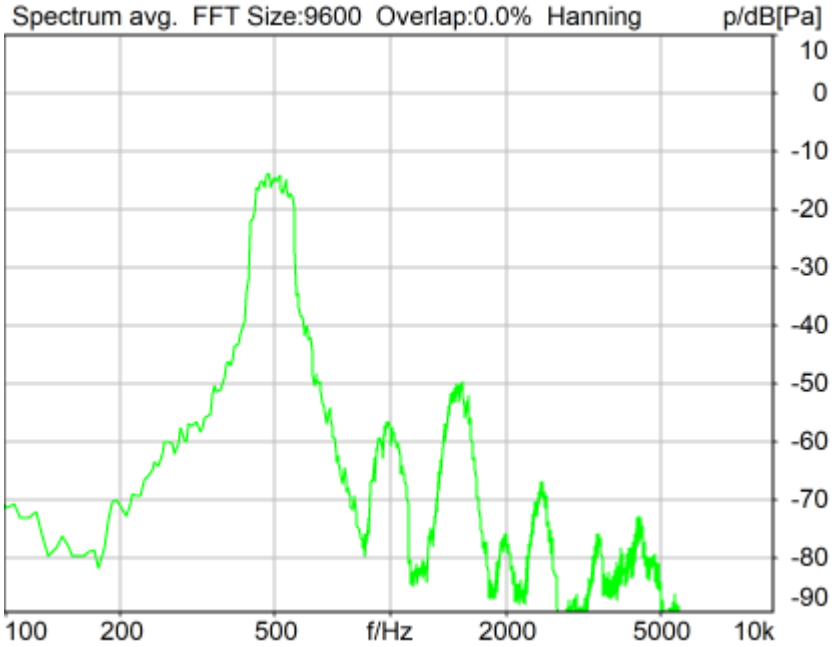
Distortion (Noise) RCV (packed): 30.37 dB (3.03%) Ok

Ok

2024/5/21 13:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



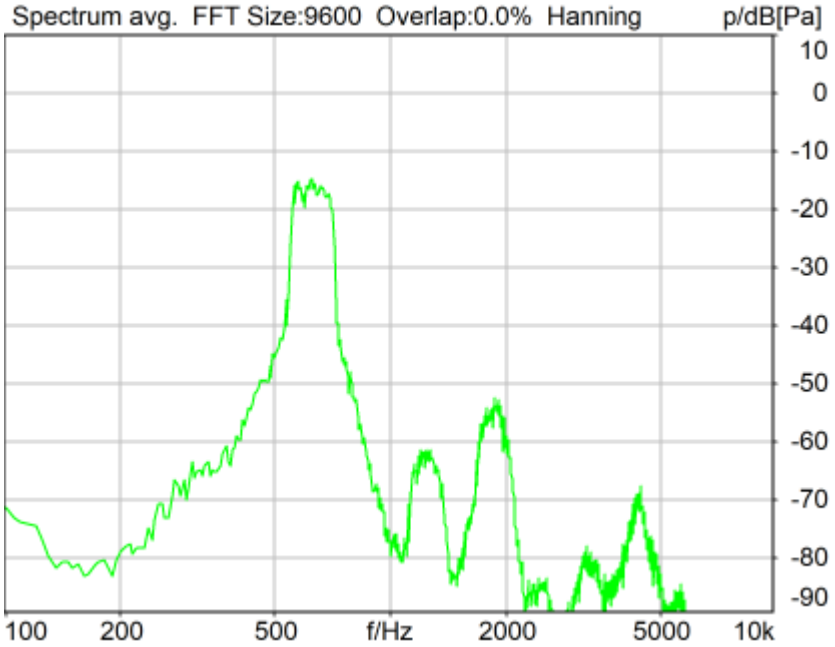
Distortion (Noise) RCV (packed): 29.35 dB (3.41%) Ok

Ok

2024/5/21 13:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



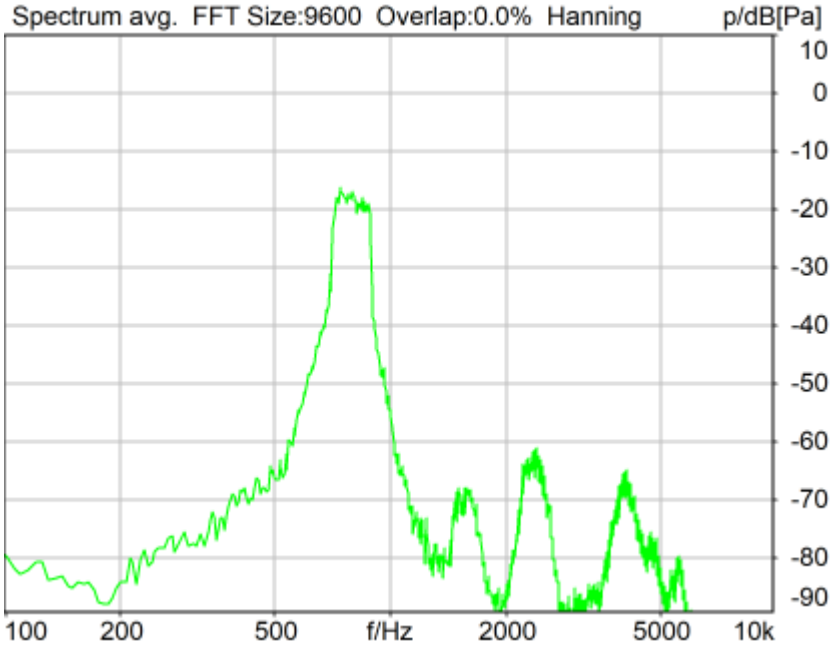
Distortion (Noise) RCV (packed): 30.60 dB (2.95%) Ok

Ok

2024/5/21 13:57 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



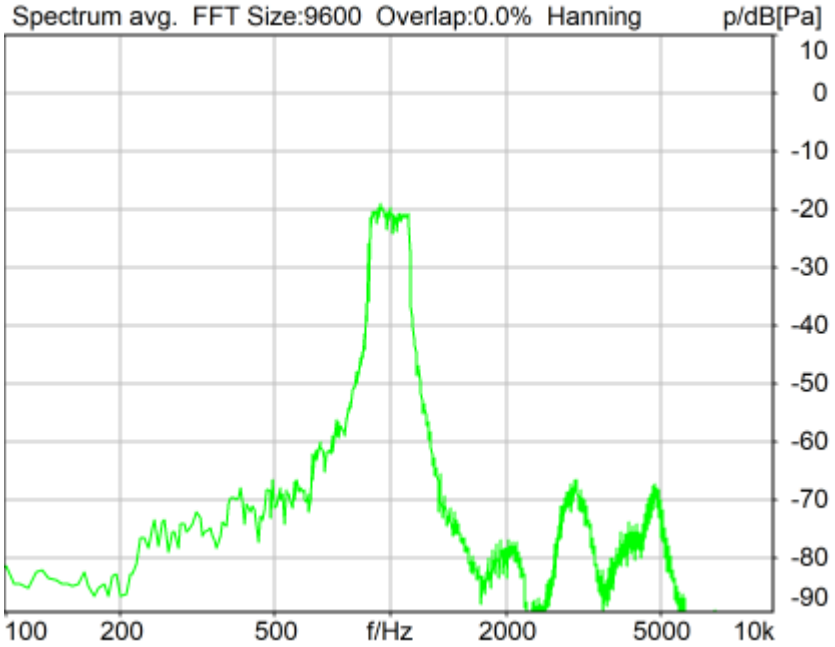
Distortion (Noise) RCV (packed): 29.35 dB (3.41%) Ok

Ok

2024/5/21 13:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



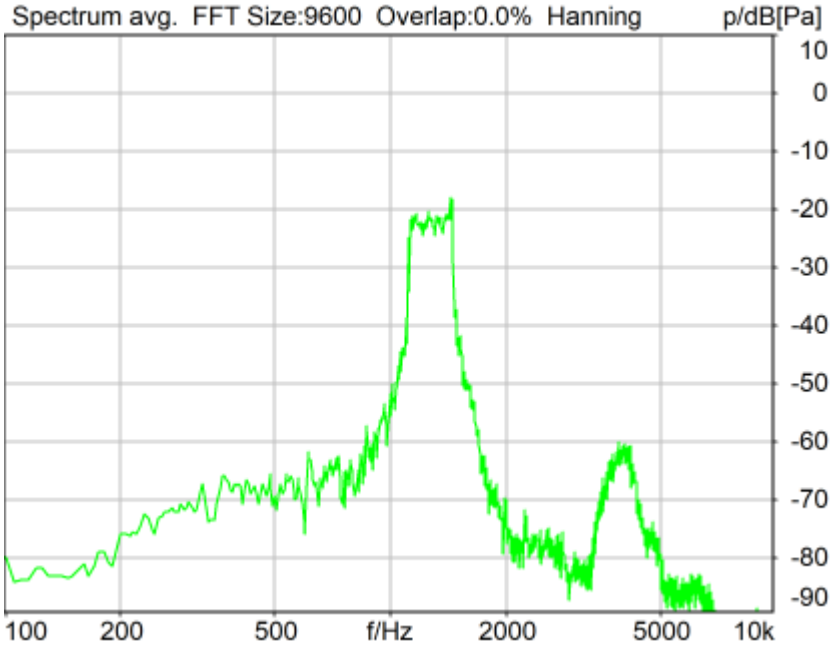
Distortion (Noise) RCV (packed): 29.32 dB (3.42%) Ok

Ok

2024/5/21 13:58 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



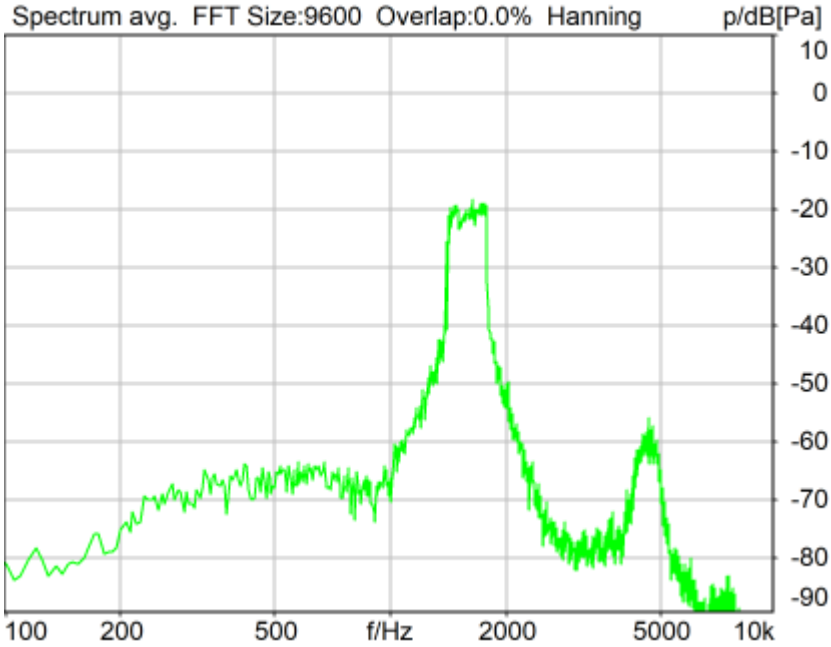
Distortion (Noise) RCV (packed): 20.66 dB (9.27%) Ok

Ok

2024/5/21 13:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 1600 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



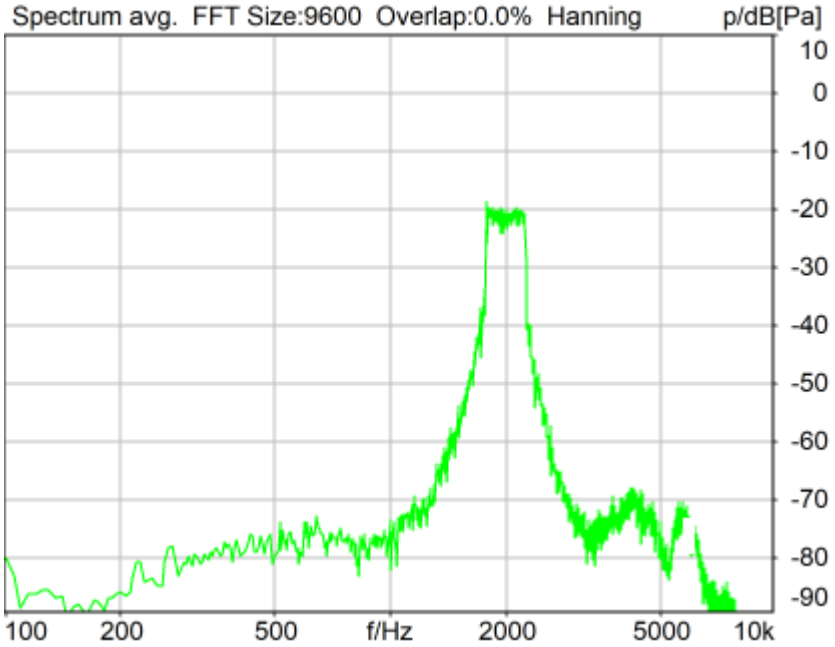
Distortion (Noise) RCV (packed): 24.97 dB (5.64%) Ok

Ok

2024/5/21 13:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



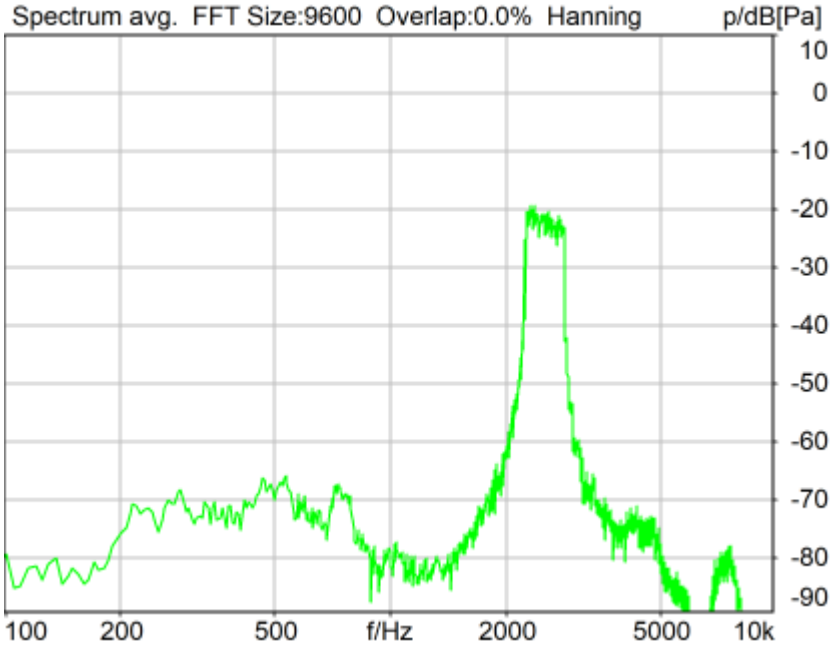
Distortion (Noise) RCV (packed): 23.59 dB (6.62%) Ok

Ok

2024/5/21 13:59 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 2500 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



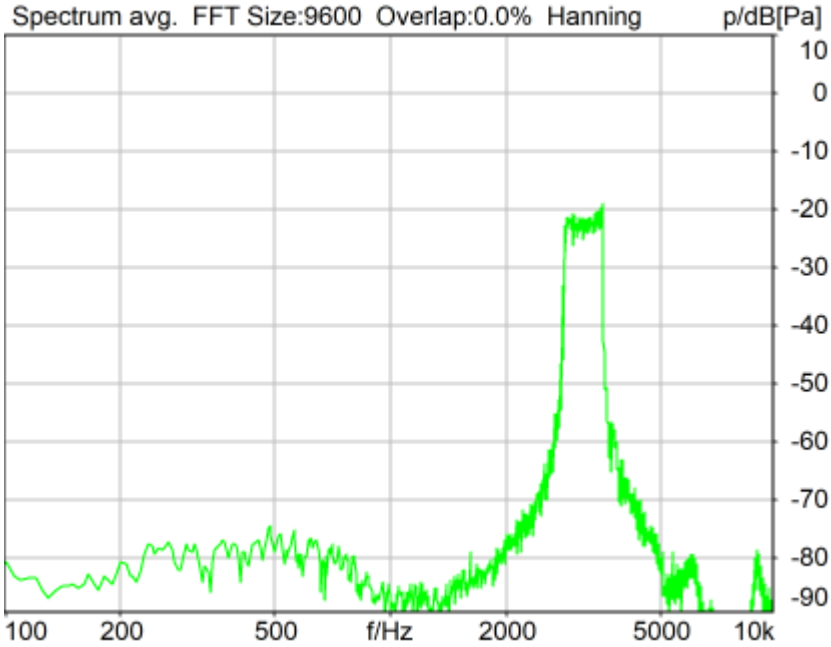
Distortion (Noise) RCV (packed): 29.96 dB (3.18%) Ok

Ok

2024/5/21 14:00 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 3150 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



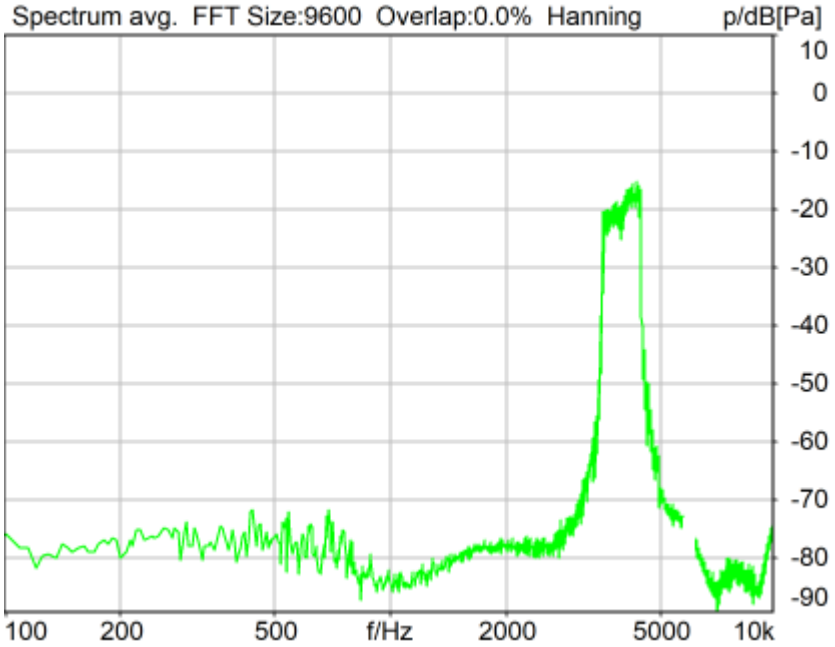
Distortion (Noise) RCV (packed): 32.65 dB (2.33%) Ok

Ok

2024/5/21 14:00 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 4000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



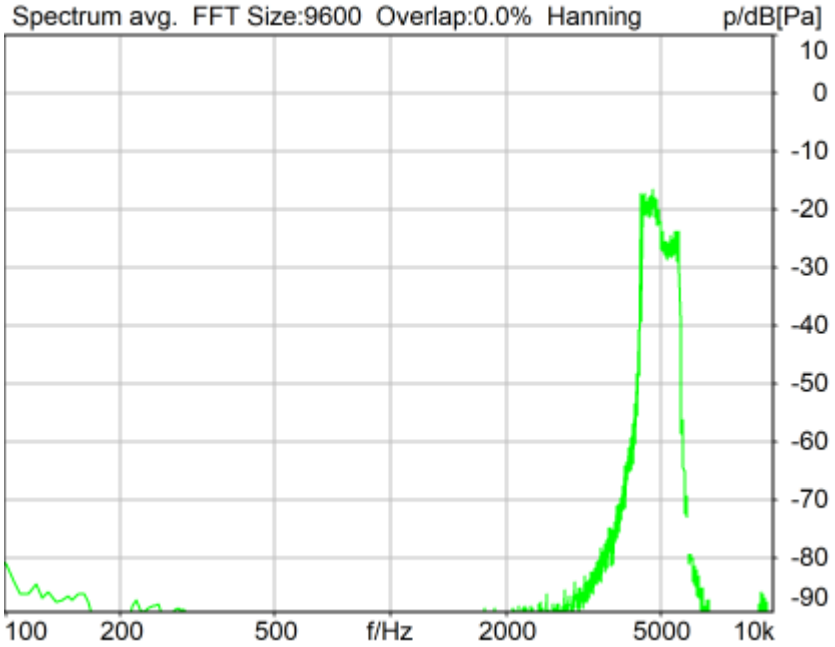
Distortion (Noise) RCV (packed): 33.82 dB (2.04%) Ok

Ok

2024/5/21 14:01 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.2 RCV Distortion and Noise - 5000 Hz WB, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N



Distortion (Noise) RCV (packed): 35.39 dB (1.70%) Ok

Ok

2024/5/21 14:01 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Report - Receive Distortion and Noise (Conversational Gain), Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N

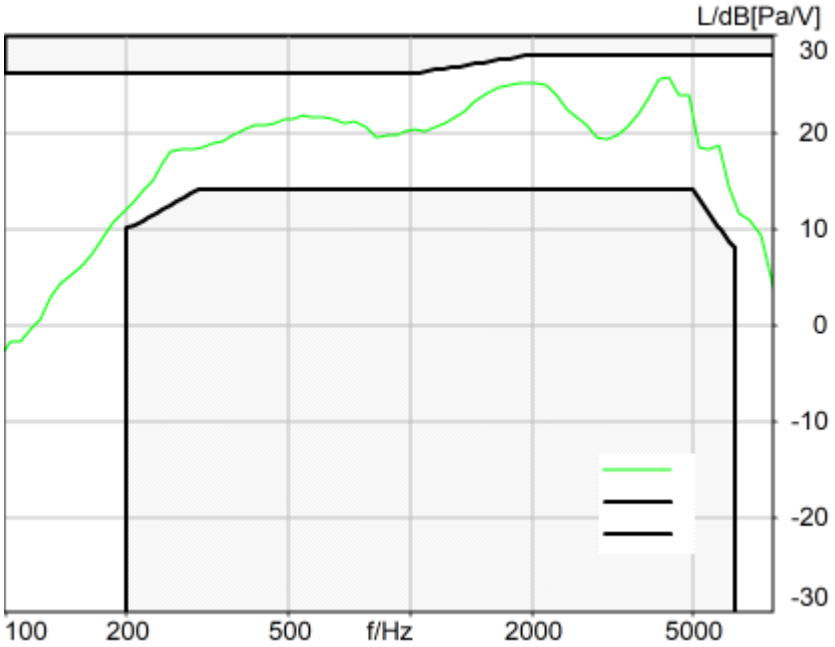
Region	Frequency	SDNR
1	250Hz	30.22 dB
2	315Hz	30.46 dB
3	400Hz	30.37 dB
4	500Hz	29.35 dB
5	630Hz	30.60 dB
6	800Hz	29.35 dB
7	1000Hz	29.32 dB
8	1250Hz	20.66 dB
9	1600Hz	24.97 dB
10	2000Hz	23.59 dB
11	2500Hz	29.96 dB
12	3150Hz	32.65 dB
13	4000Hz	33.82 dB
14	5000Hz	35.39 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 20.66dB at 1250Hz.

2024/5/21 14:01 ACQUA

5.3 Frequency Response 8N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



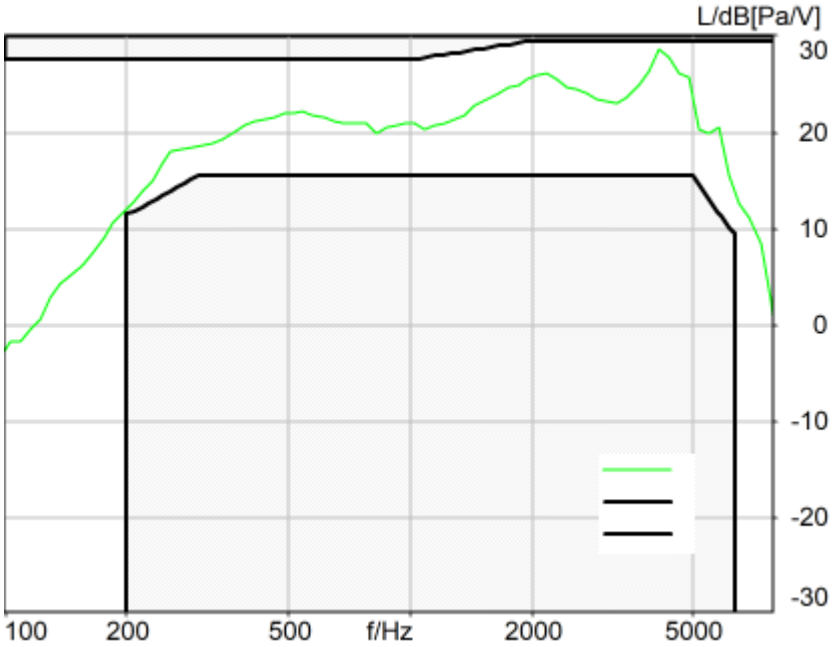
Absolute minimal distance
2.35 dB at 4369.4 Hz Ok

Ok

2024/5/21 13:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



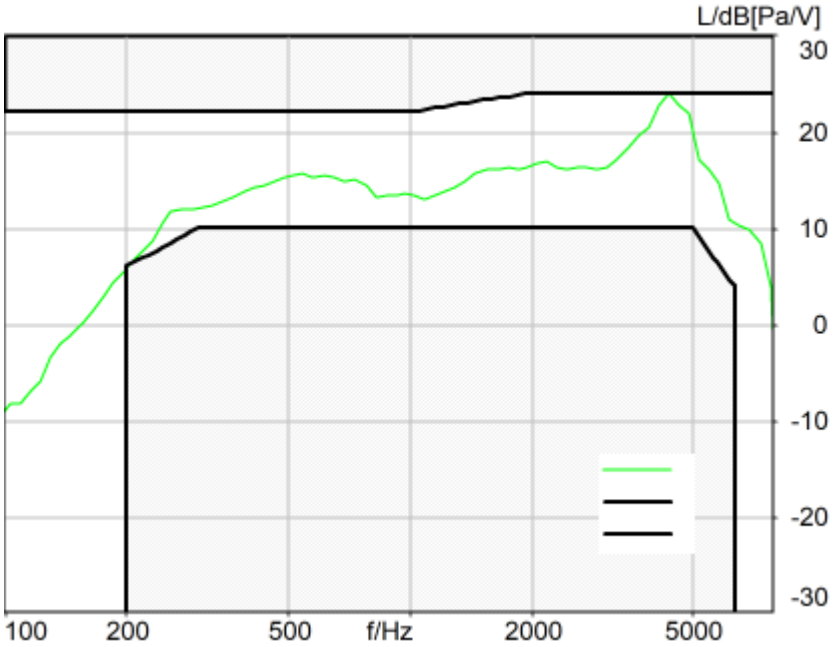
Absolute minimal distance
0.93 dB at 4119.5 Hz Ok

Ok

2024/5/21 13:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



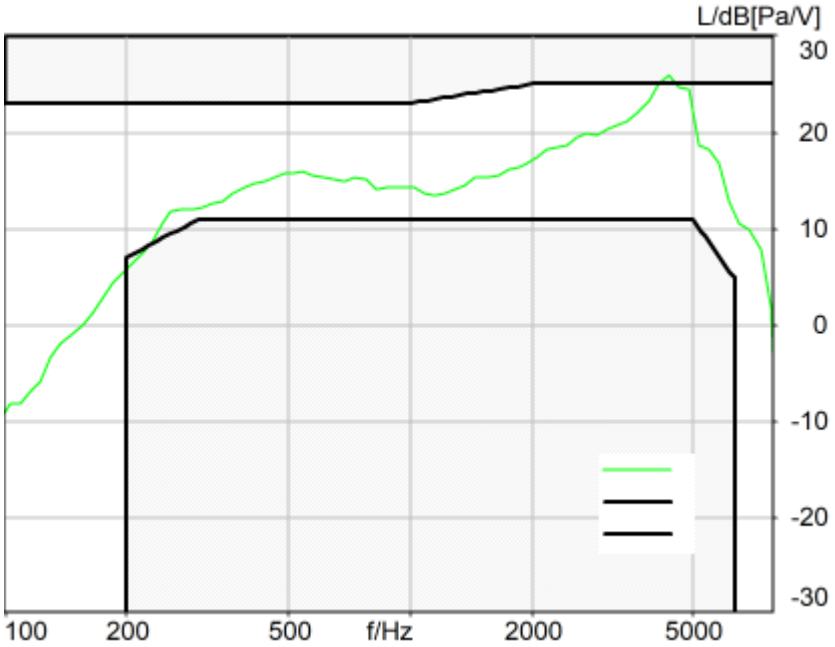
Absolute minimal distance
0.13 dB at 205.7 Hz Ok

Ok

2024/5/21 14:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

TIA-5050 (2018-01) \ Measurements \ Wideband



Absolute minimal distance
-0.83 dB at 205.7 Hz Not Ok

Not Ok

2024/5/21 14:02 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor