
Measurement Protocol

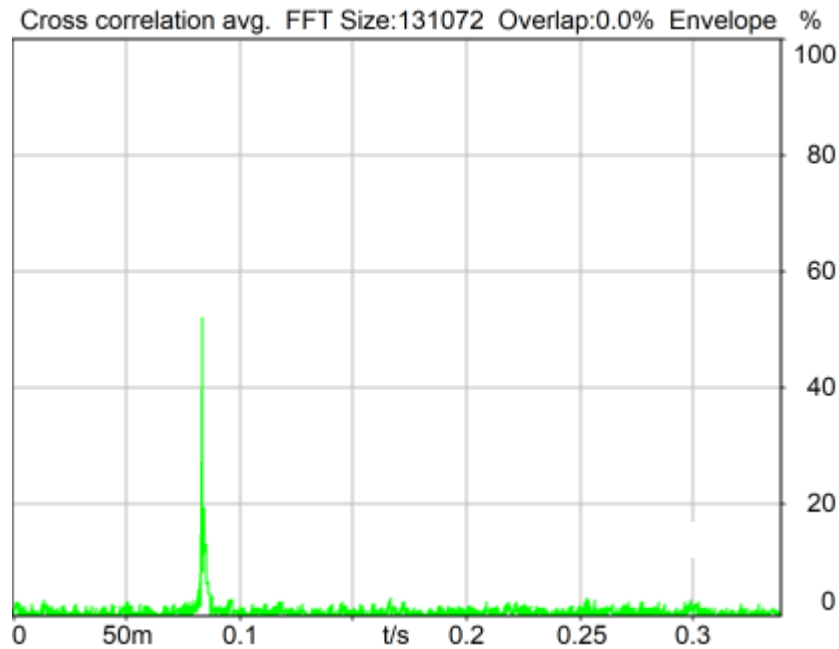
Measurement Object	LTE Band 66_20QPSK_100_0_EVS NB 24.4kbps_CH132322
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:07
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



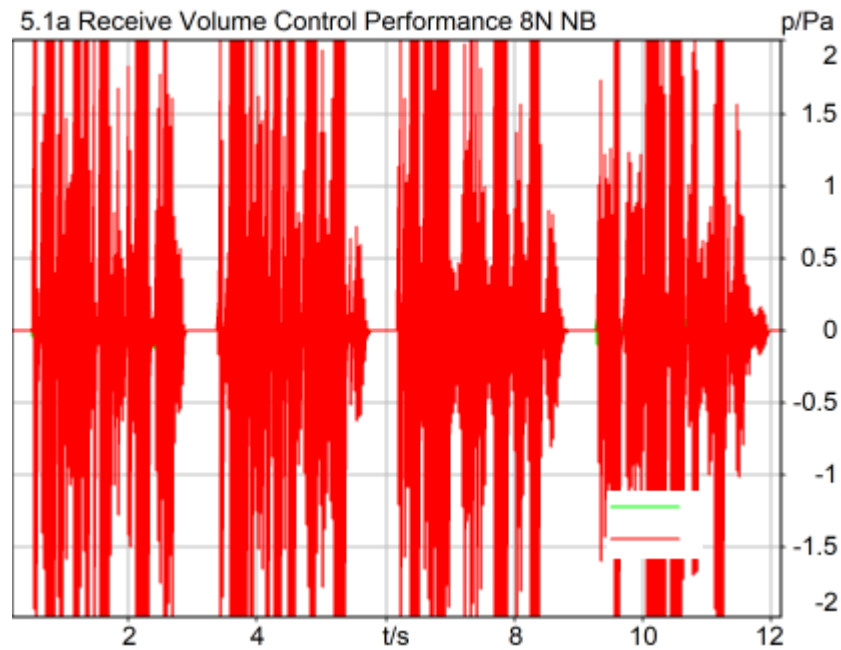
Delay (Cross): 84.0 ms

2024/3/13 20:55 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 92.46 dB[SPL], Act.: 81.29%

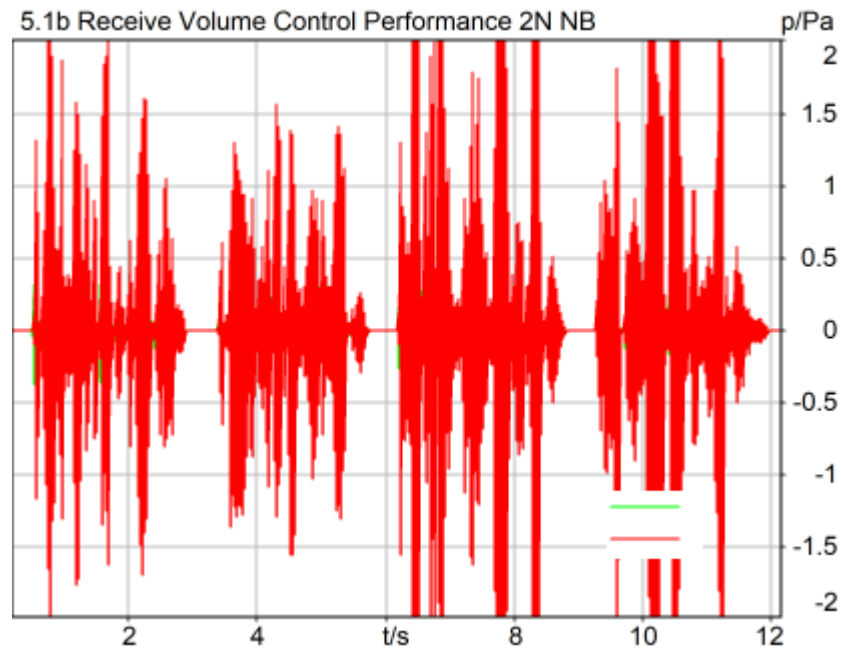
Corrected Speech Level: 22.46 dB[SPL] Ok

Ok

2024/3/13 21:12 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 84.16 dB[SPL], Act.: 81.82%

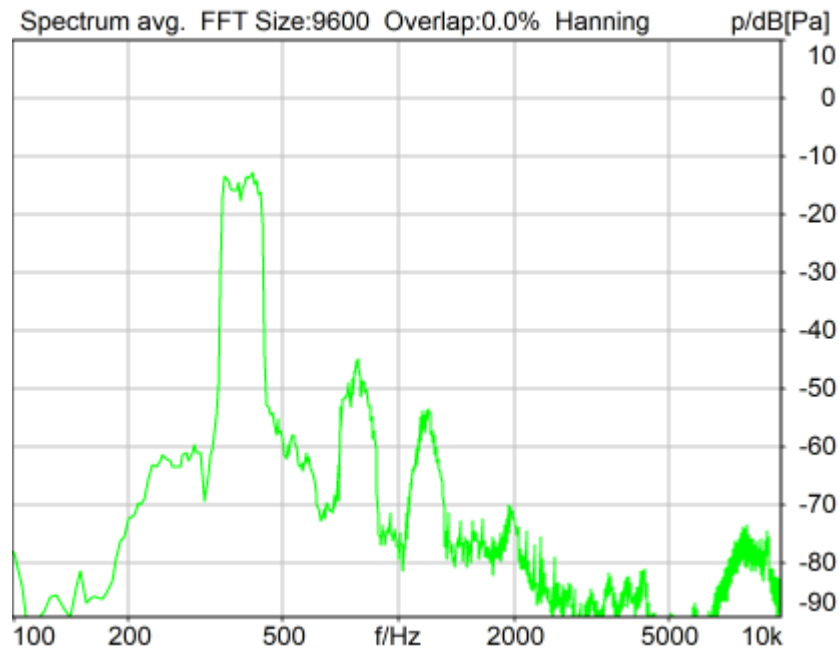
Corrected Speech Level: 14.16 dB[SPL] Ok

Ok

2024/3/13 22:25 ACQUA 5.1.200

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): 32.18 dB (2.46%) Ok

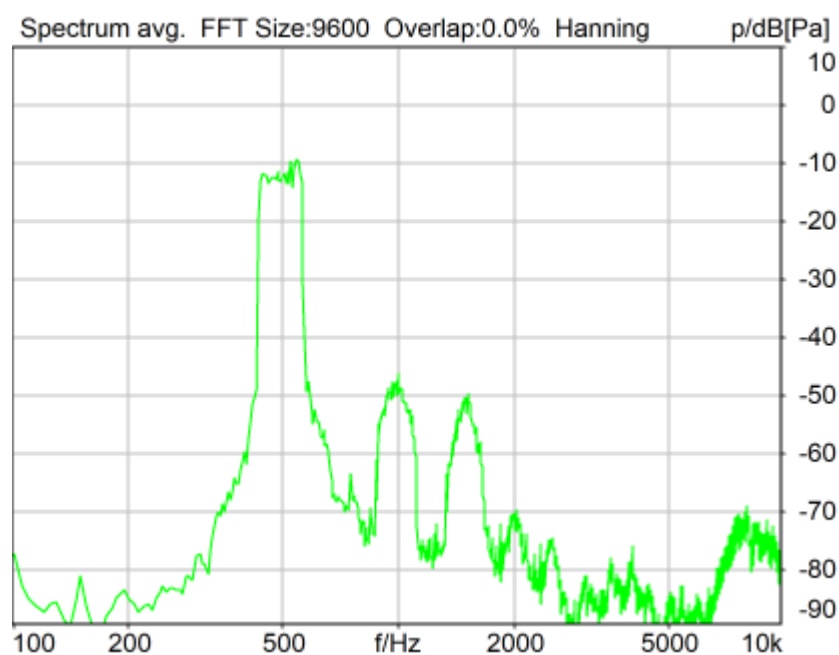
Ok

2024/3/13 21:13 ACQUA 5.1.200

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): 33.90 dB (2.02%) Ok

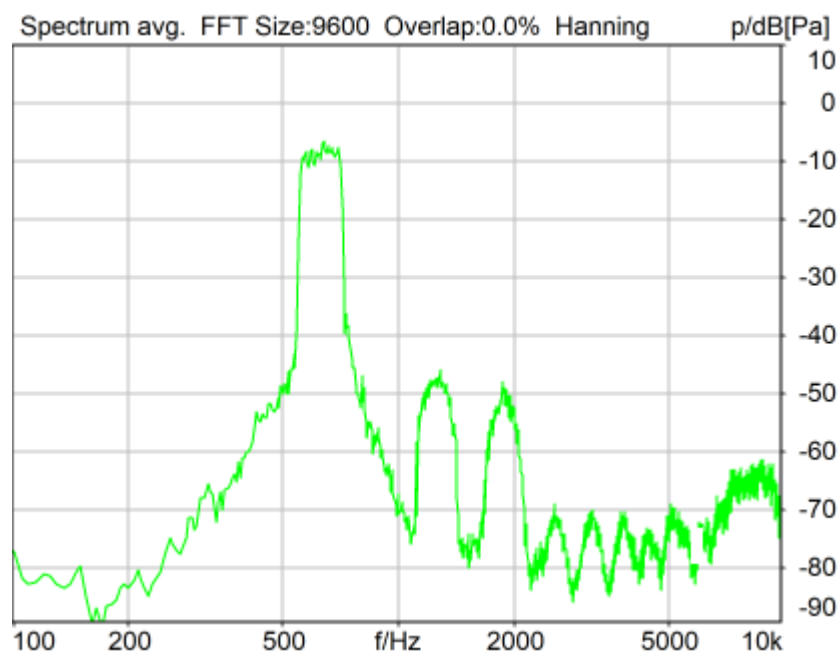
Ok

2024/3/13 21:13 ACQUA 5.1.200

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): 34.16 dB (1.96%) Ok

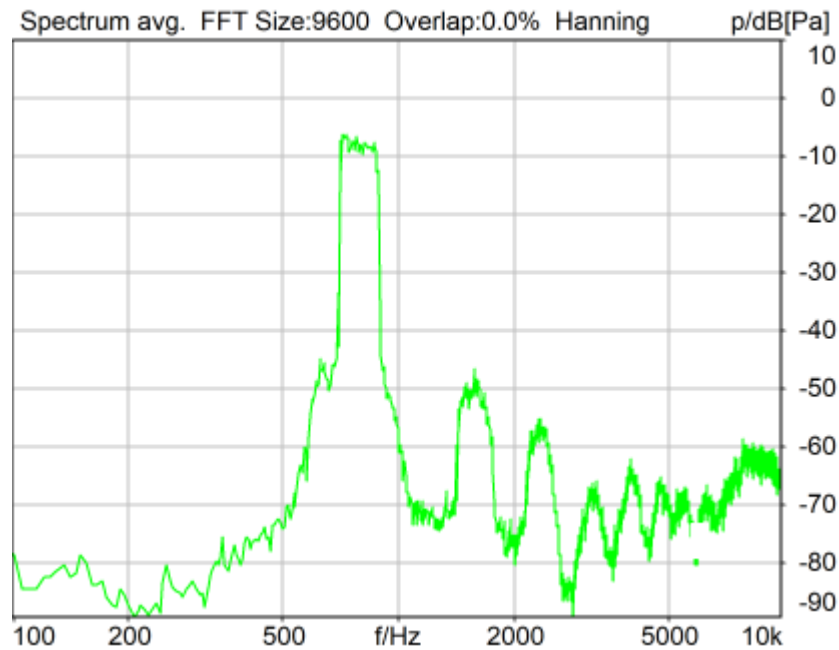
Ok

2024/3/13 21:14 ACQUA 5.1.200

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): 36.70 dB (1.46%) Ok

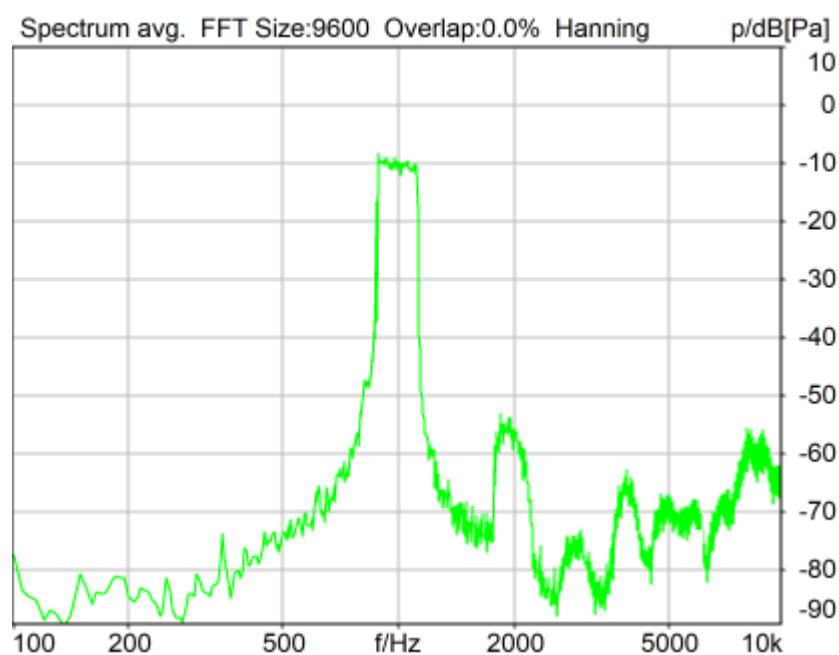
Ok

2024/3/13 21:14 ACQUA 5.1.200

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): 38.03 dB (1.25%) Ok

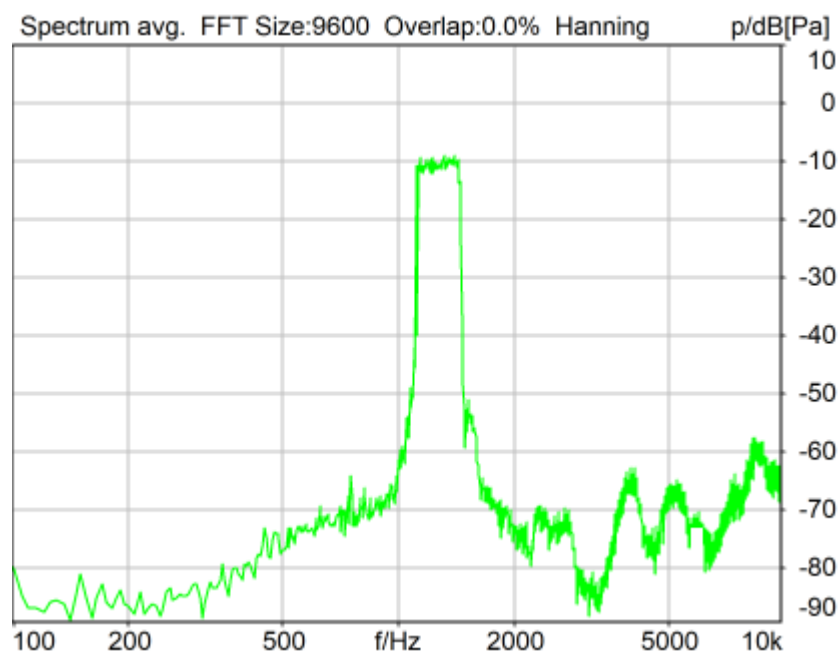
Ok

2024/3/13 21:14 ACQUA 5.1.200

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): 30.78 dB (2.89%) Ok

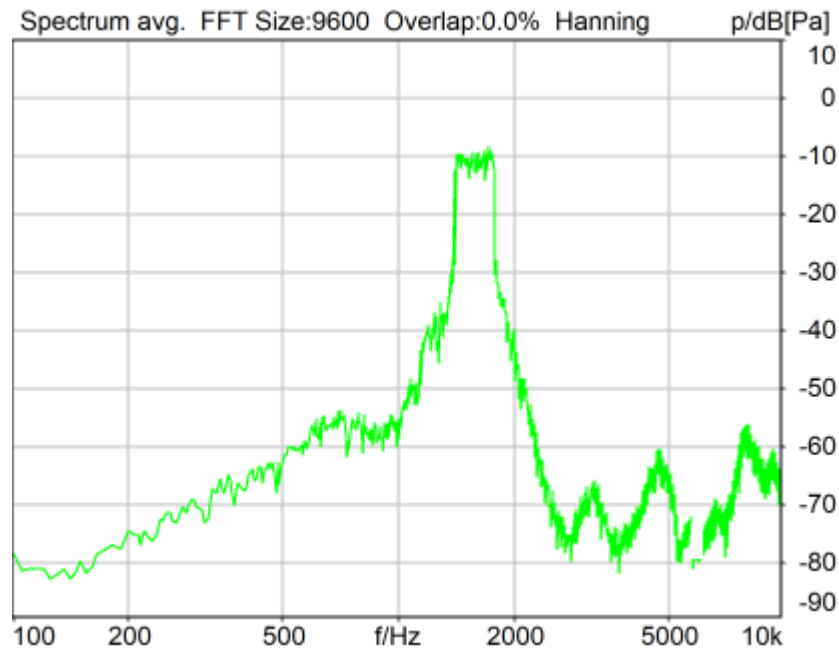
Ok

2024/3/13 21:15 ACQUA 5.1.200

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): 25.56 dB (5.27%) Ok

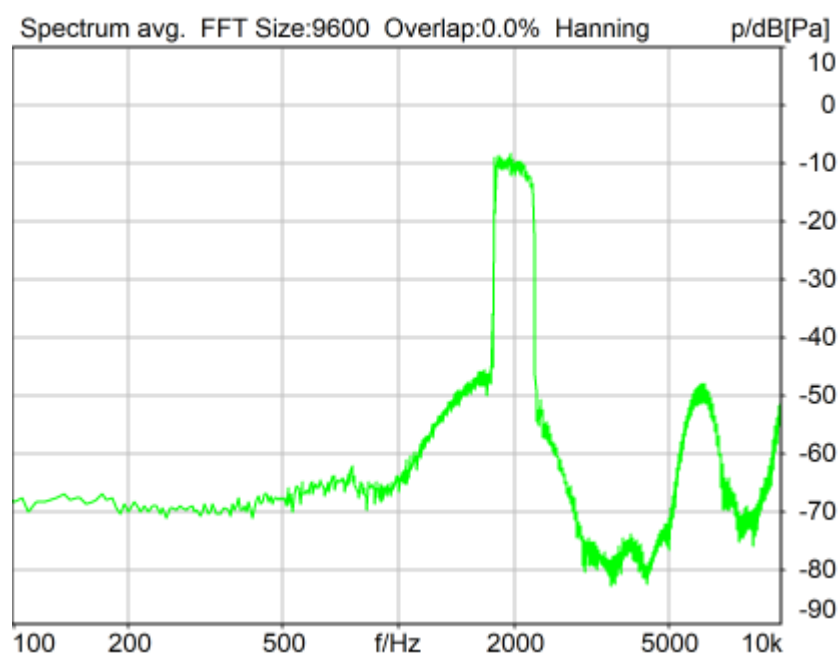
Ok

2024/3/13 21:15 ACQUA 5.1.200

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): 32.25 dB (2.44%) Ok

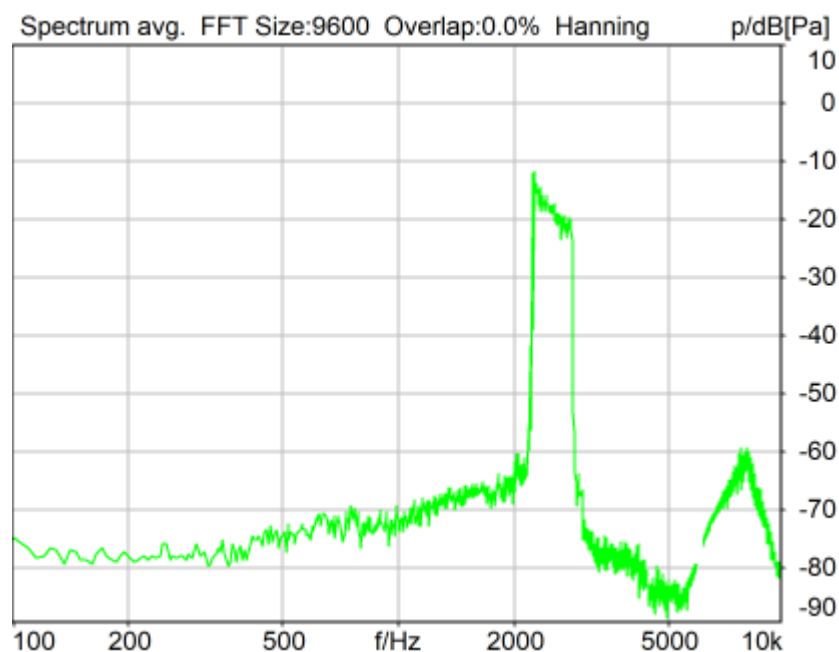
Ok

2024/3/13 21:16 ACQUA 5.1.200

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): 38.64 dB (1.17%) Ok

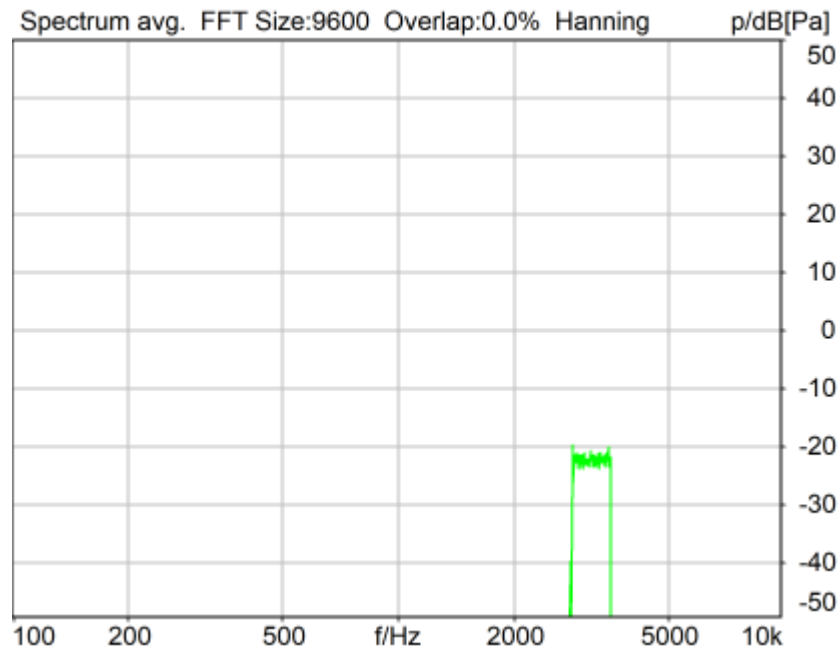
Ok

2024/3/13 21:16 ACQUA 5.1.200

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): 36.82 dB (1.44%) Ok

Ok

2024/3/13 21:17 ACQUA 5.1.200

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

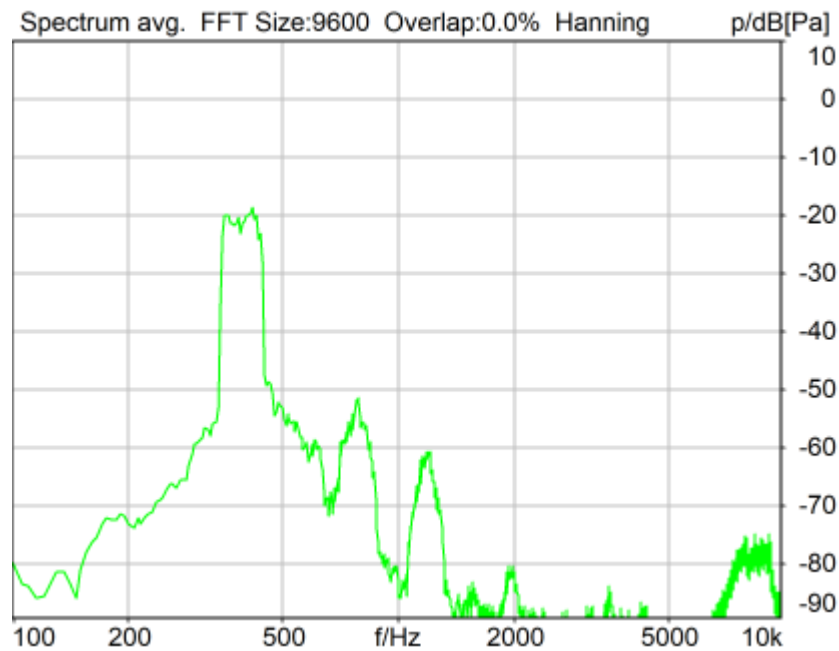
Region	Frequency	SDNR
1	400Hz	32.18 dB
2	500Hz	33.90 dB
3	630Hz	34.16 dB
4	800Hz	36.70 dB
5	1000Hz	38.03 dB
6	1250Hz	30.78 dB
7	1600Hz	25.56 dB
8	2000Hz	32.25 dB
9	2500Hz	38.64 dB
10	3150Hz	36.82 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 25.56dB at 1600Hz.

2024/3/13 21:17 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): 31.07 dB (2.80%) Ok

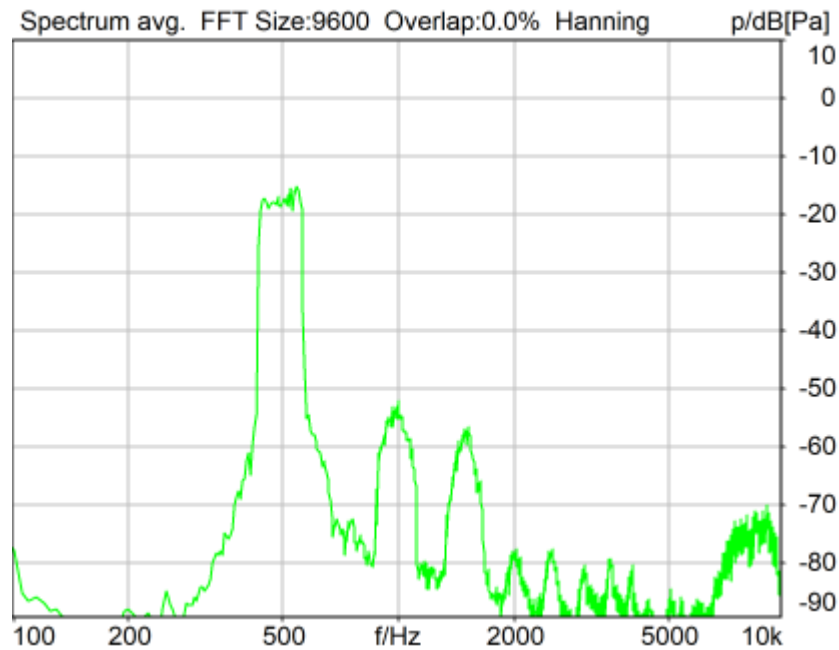
Ok

2024/3/13 22:25 ACQUA 5.1.200

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): 34.20 dB (1.95%) Ok

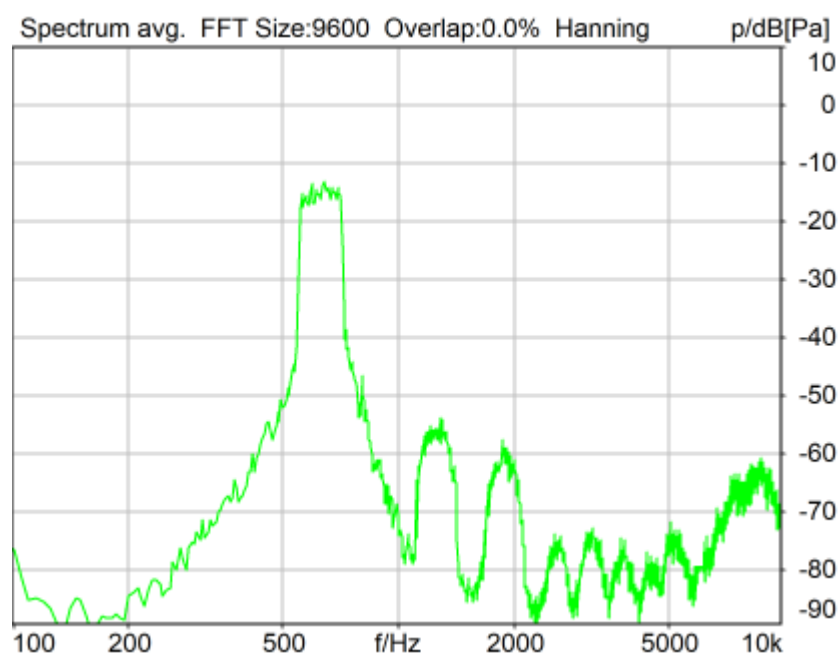
Ok

2024/3/13 22:26 ACQUA 5.1.200

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): 32.58 dB (2.35%) Ok

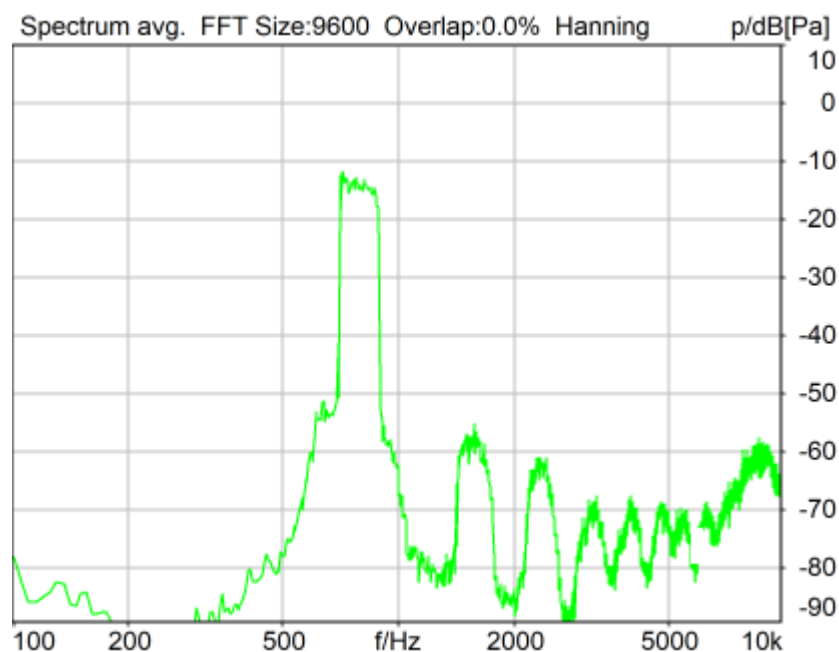
Ok

2024/3/13 22:26 ACQUA 5.1.200

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): 34.87 dB (1.81%) Ok

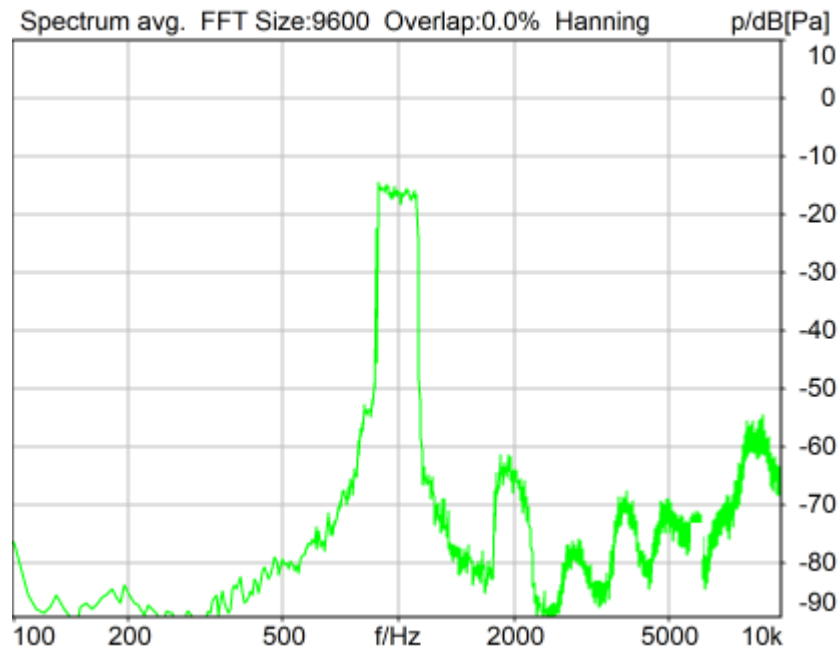
Ok

2024/3/13 22:27 ACQUA 5.1.200

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): 34.31 dB (1.93%) Ok

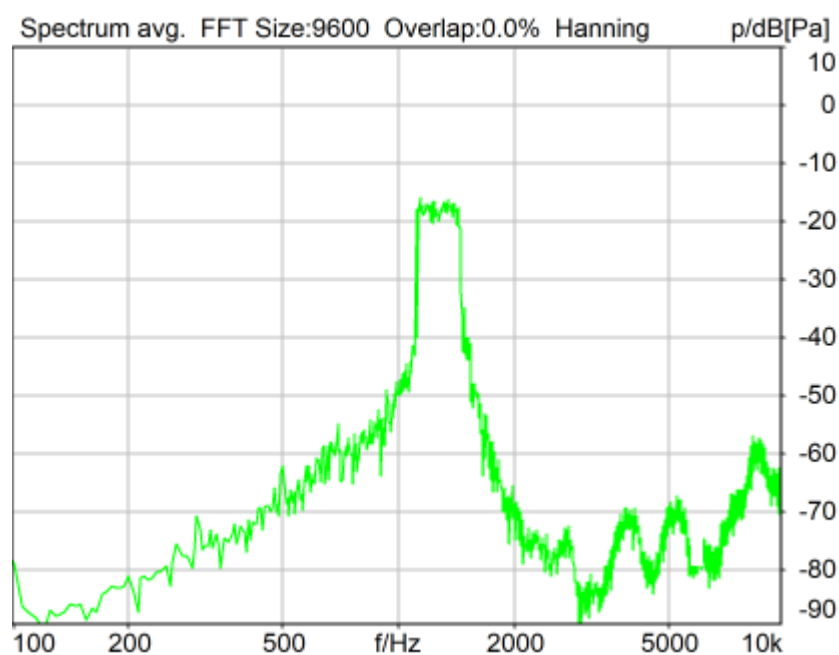
Ok

2024/3/13 22:27 ACQUA 5.1.200

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): 24.82 dB (5.74%) Ok

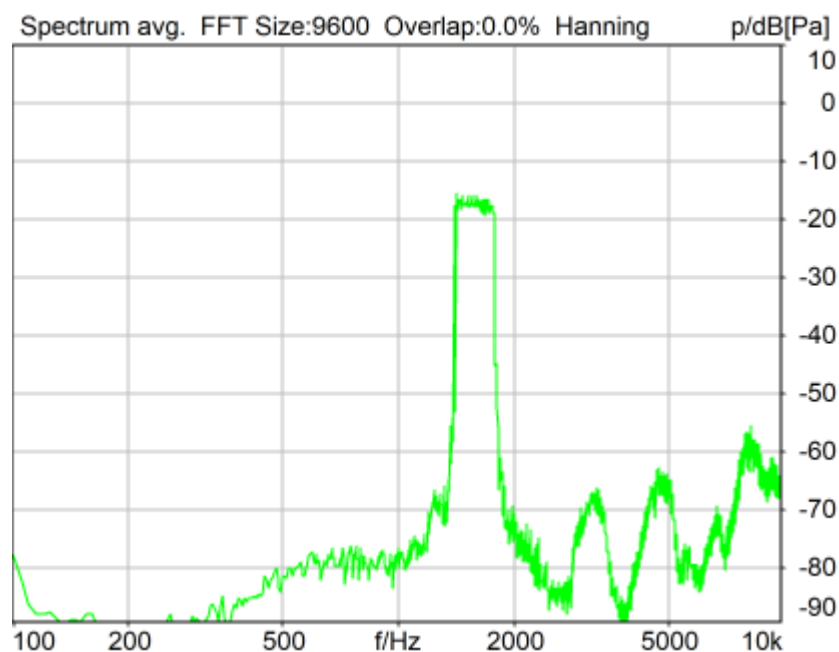
Ok

2024/3/13 22:27 ACQUA 5.1.200

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): 36.23 dB (1.54%) Ok

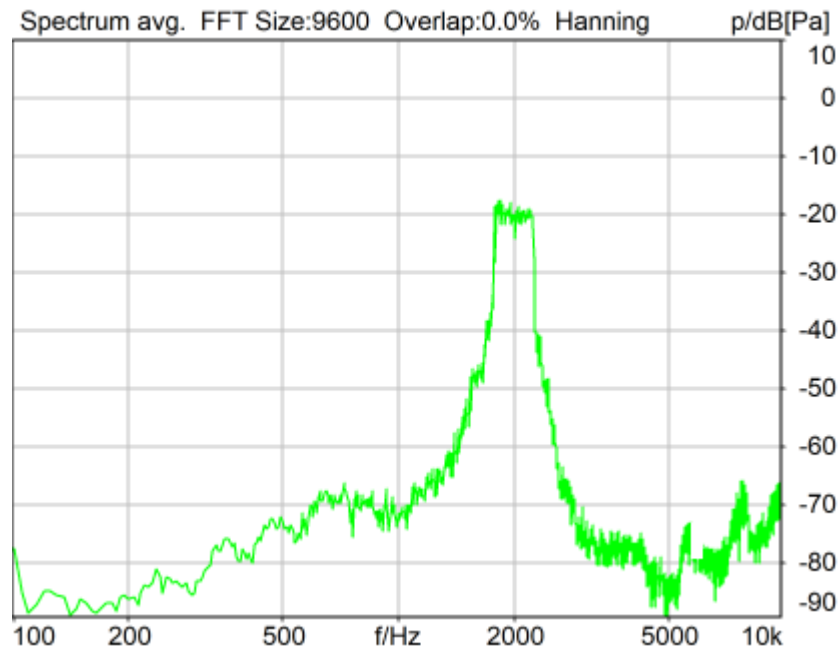
Ok

2024/3/13 22:28 ACQUA 5.1.200

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): 23.76 dB (6.49%) Ok

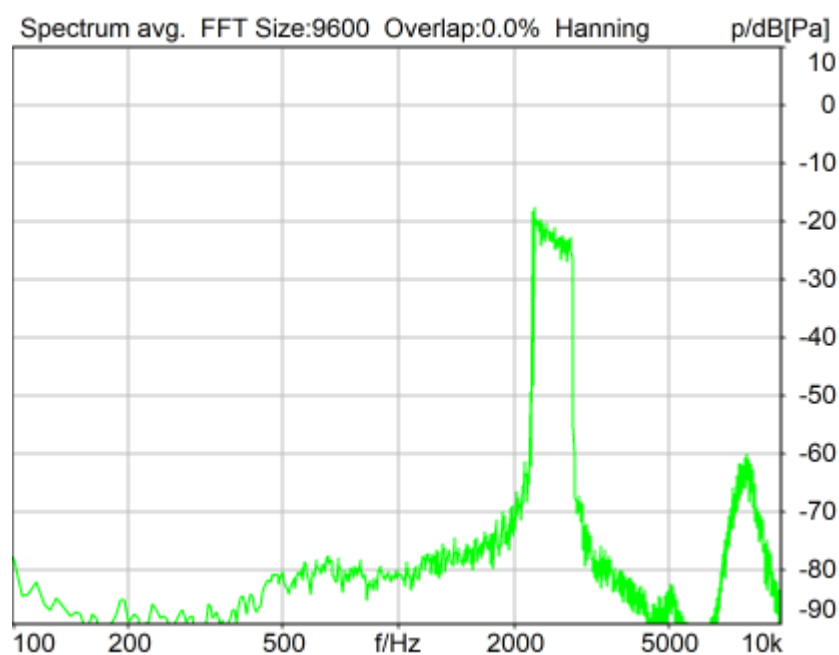
Ok

2024/3/13 22:28 ACQUA 5.1.200

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): 38.52 dB (1.19%) Ok

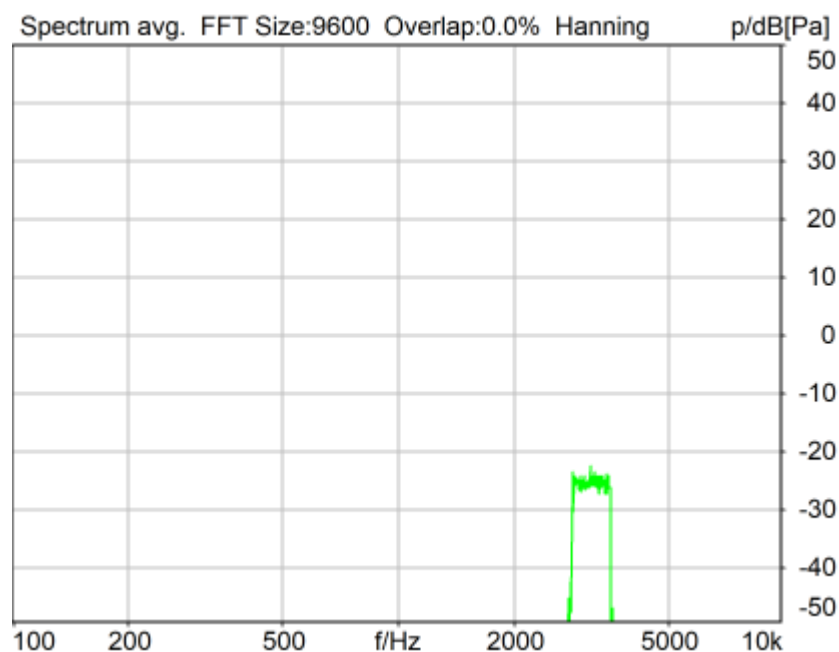
Ok

2024/3/13 22:29 ACQUA 5.1.200

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): 29.43 dB (3.38%) Ok

Ok

2024/3/13 22:29 ACQUA 5.1.200

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	31.07 dB

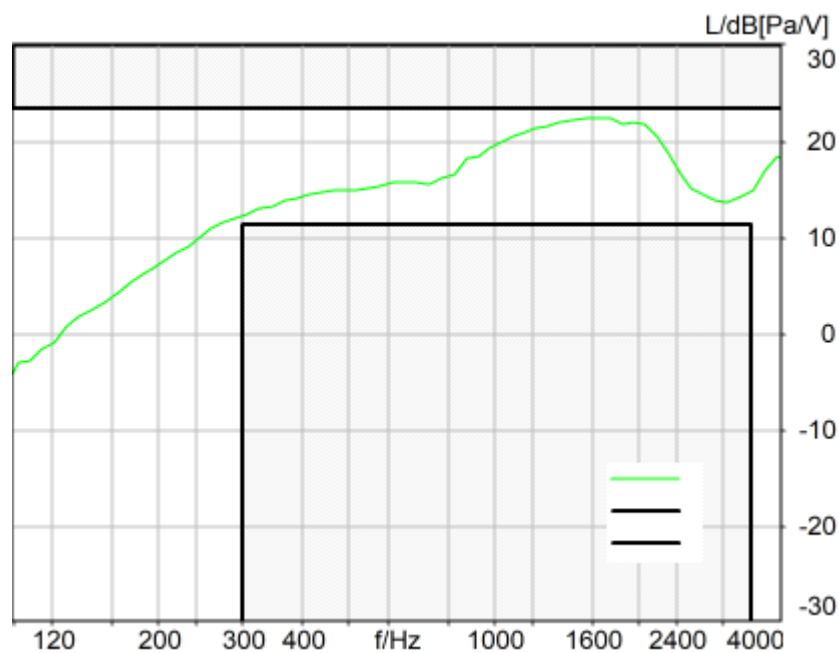
2	500Hz	34.20 dB
3	630Hz	32.58 dB
4	800Hz	34.87 dB
5	1000Hz	34.31 dB
6	1250Hz	24.82 dB
7	1600Hz	36.23 dB
8	2000Hz	23.76 dB
9	2500Hz	38.52 dB
10	3150Hz	29.43 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.76dB at 2000Hz.

2024/3/13 22:29 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



Absolute minimal distance
1.03 dB at 305.9 Hz Ok

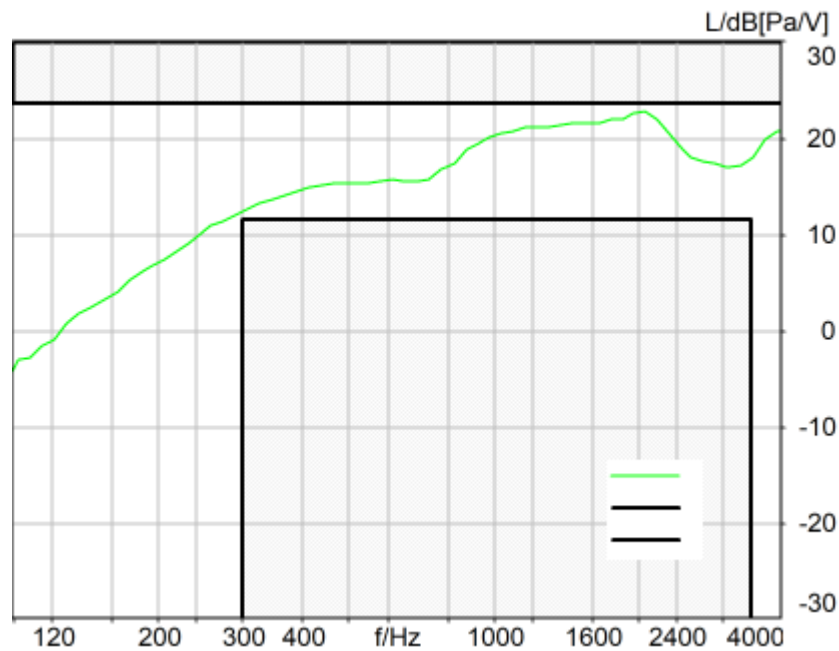
Ok

2024/3/13 21:01 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



Absolute minimal distance

0.94 dB at 2057.5 Hz Ok

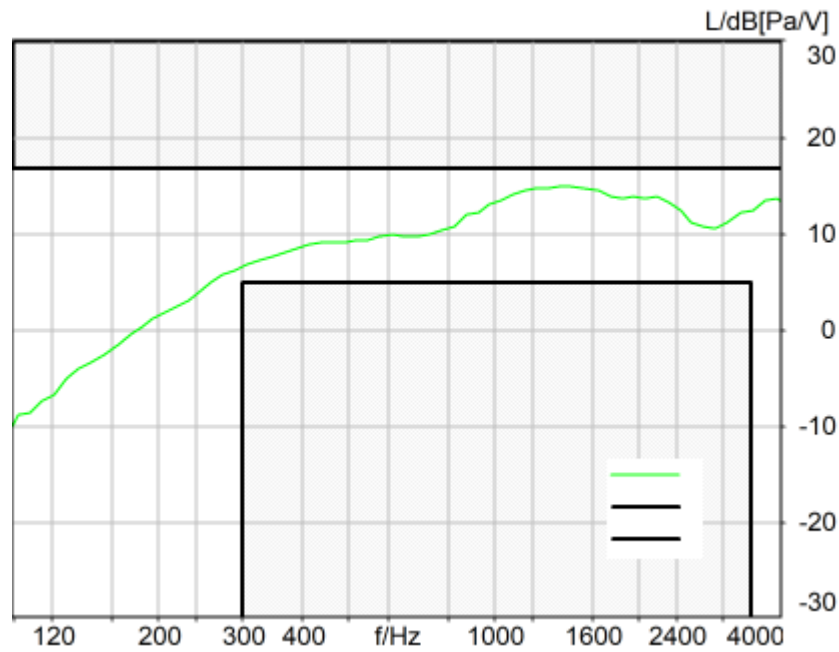
Ok

2024/3/13 21:00 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



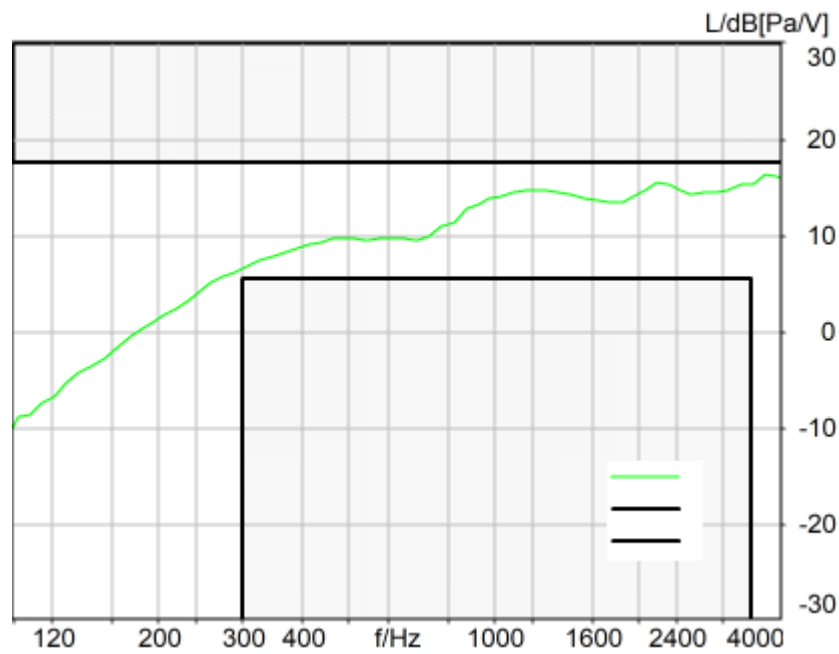
Absolute minimal distance
1.87 dB at 1360.9 Hz Ok

Ok

2024/3/13 22:30 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
1.17 dB at 3657.5 Hz Ok

Ok

2024/3/13 22:30 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

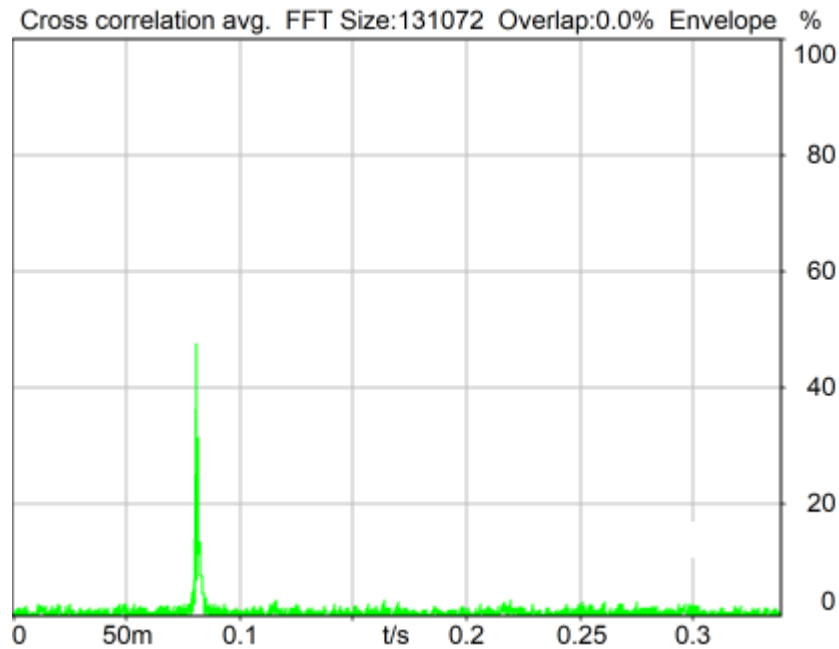
Measurement Object	LTE Band 66_20QPSK_100_0_EVS WB 128kbps_CH132322
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:08
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



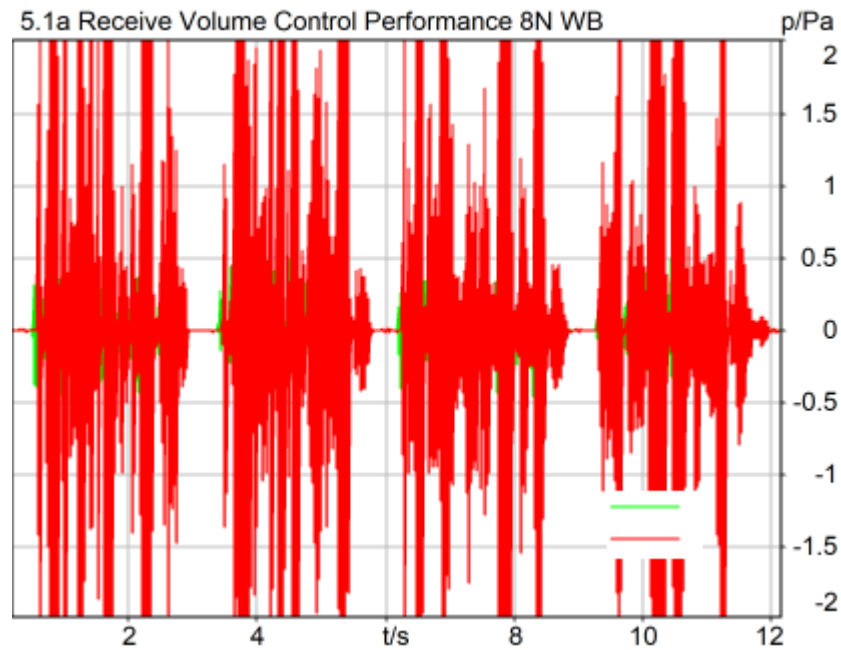
Delay (Cross): 81.4 ms

2024/3/13 22:46 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.59 dB[SPL], Act.: 83.35%

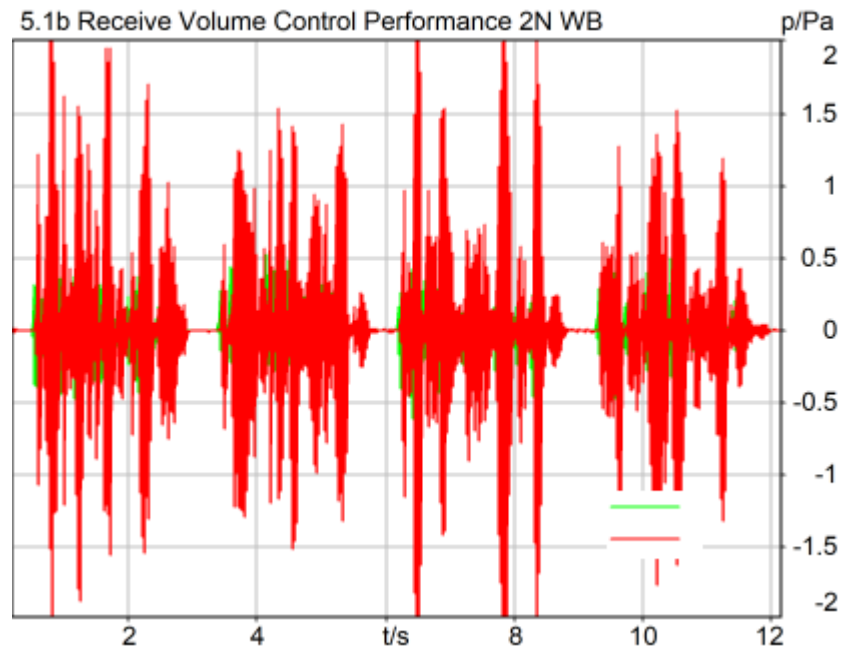
Corrected Speech Level: 17.59 dB[SPL] Ok

Ok

2024/3/18 9:38 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 81.15 dB[SPL], Act.: 83.11%

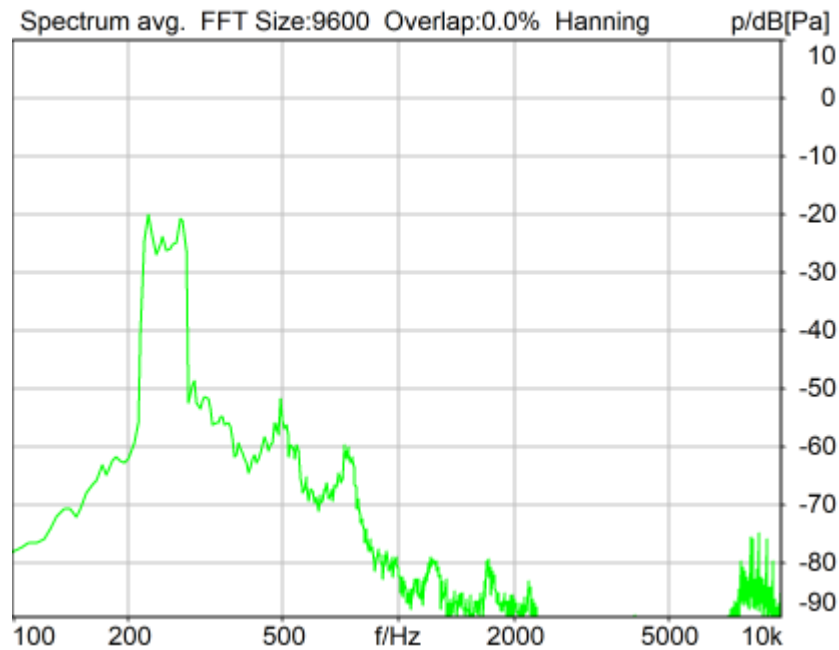
Corrected Speech Level: 11.15 dB[SPL] Ok

Ok

2024/3/18 10:22 ACQUA 5.1.200

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): 31.39 dB (2.70%) Ok

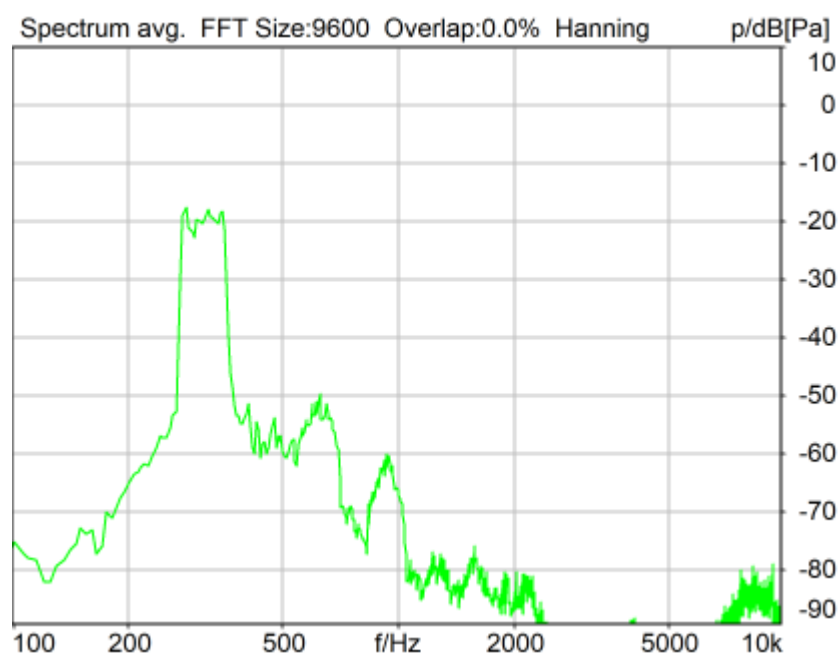
Ok

2024/3/13 23:12 ACQUA 5.1.200

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): 31.91 dB (2.54%) Ok

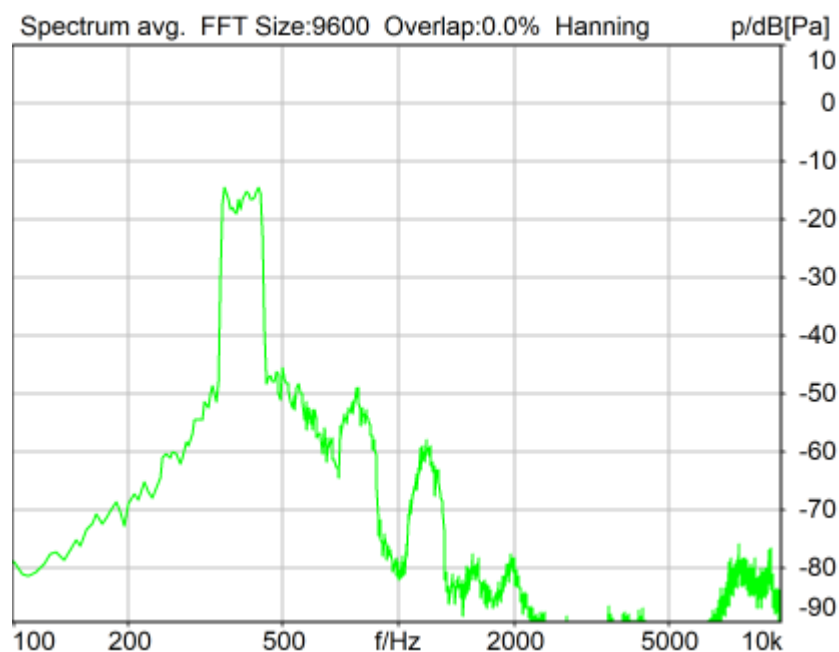
Ok

2024/3/13 23:13 ACQUA 5.1.200

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): 31.63 dB (2.62%) Ok

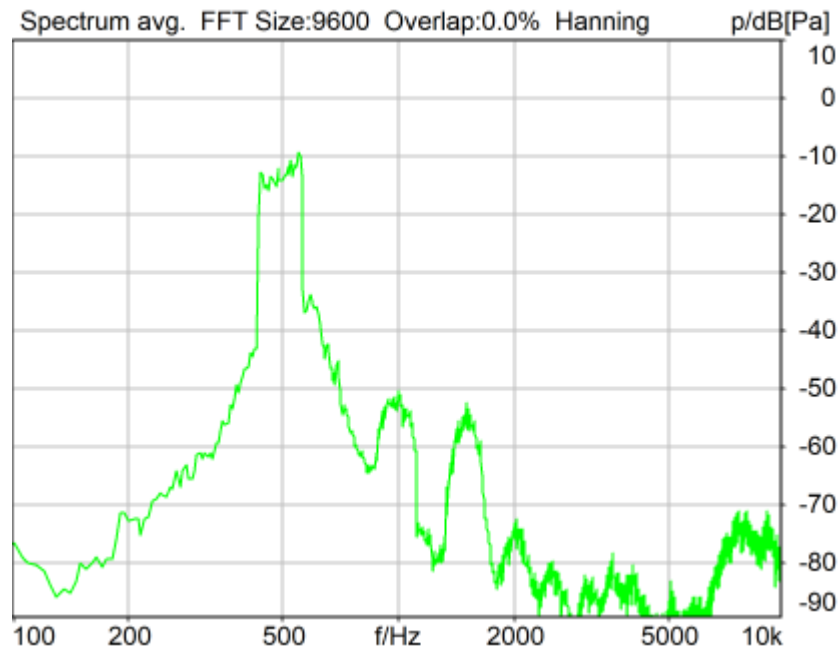
Ok

2024/3/13 23:13 ACQUA 5.1.200

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): 29.16 dB (3.48%) Ok

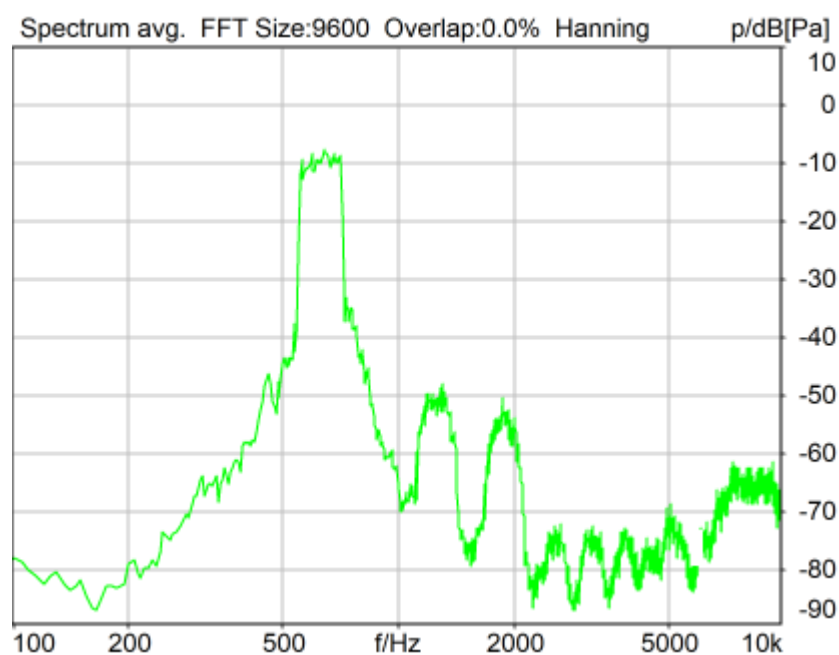
Ok

2024/3/13 23:14 ACQUA 5.1.200

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

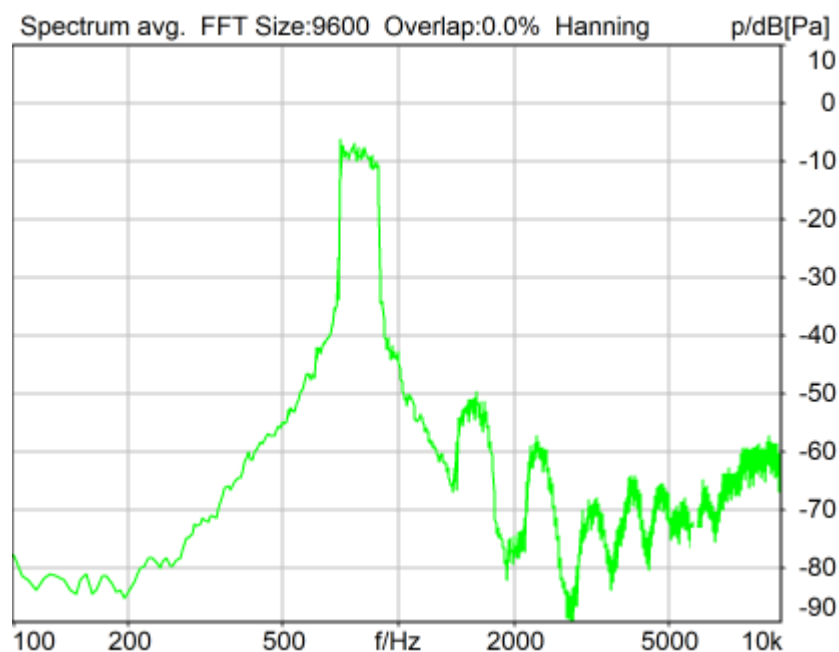
Ok

2024/3/13 23:14 ACQUA 5.1.200

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): 32.60 dB (2.34%) Ok

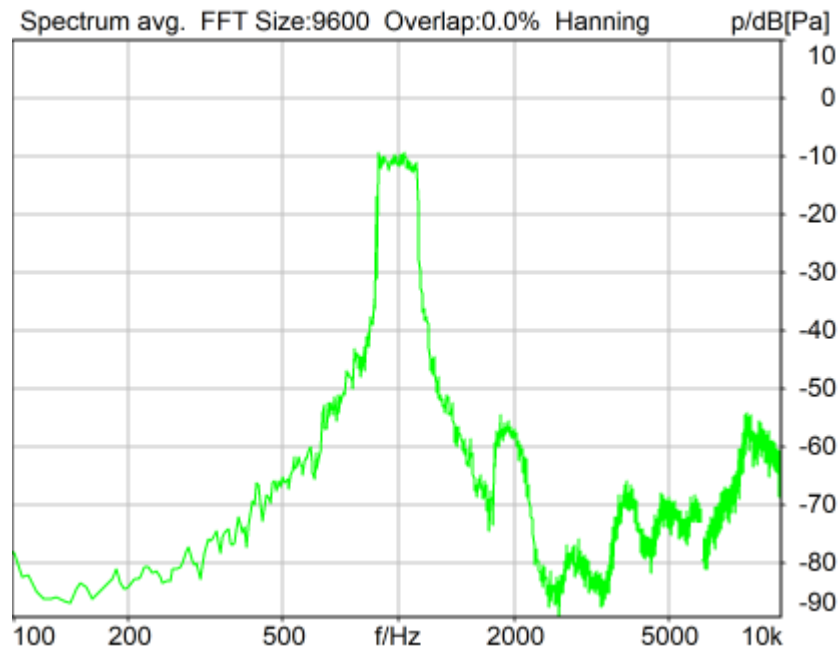
Ok

2024/3/13 23:15 ACQUA 5.1.200

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): 30.69 dB (2.92%) Ok

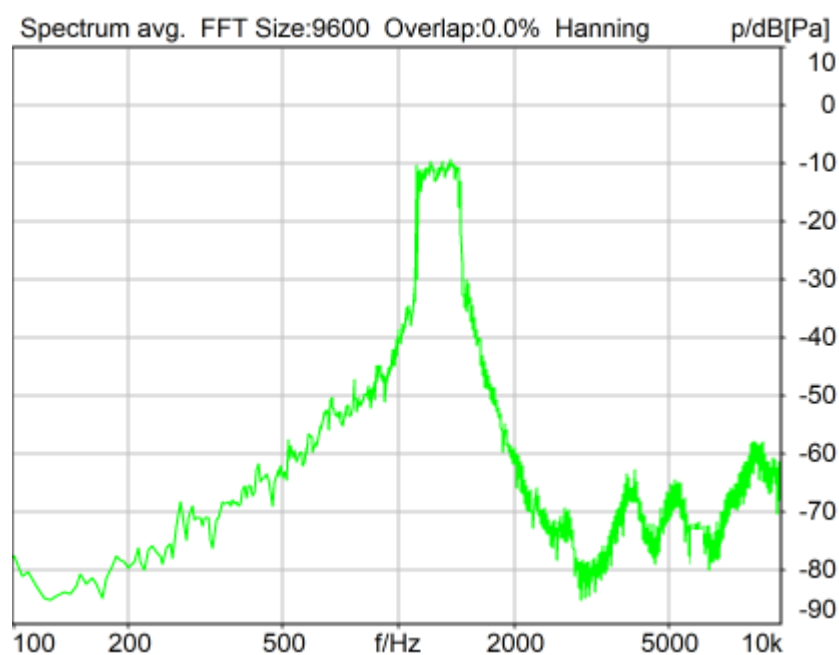
Ok

2024/3/13 23:15 ACQUA 5.1.200

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): 22.33 dB (7.65%) Ok

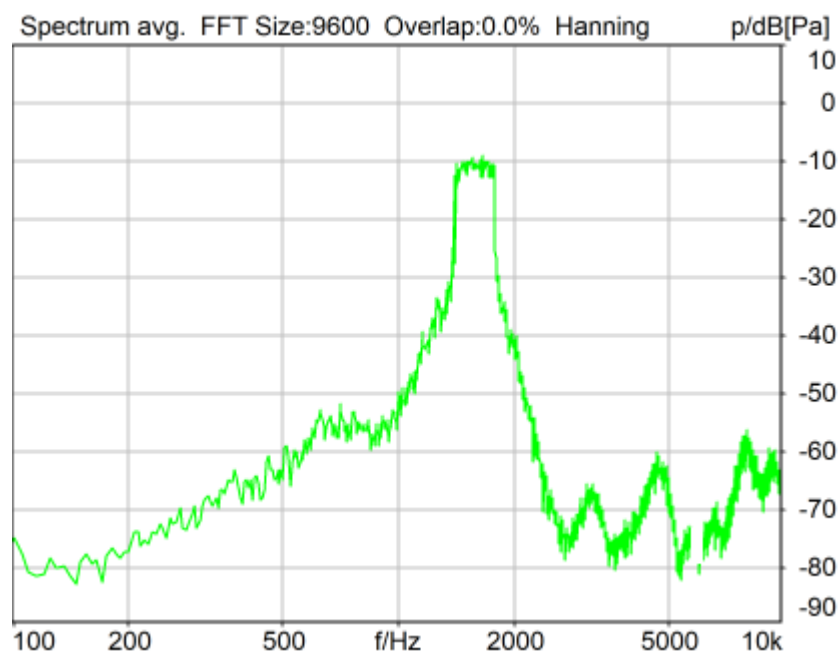
Ok

2024/3/13 23:15 ACQUA 5.1.200

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): 23.98 dB (6.32%) Ok

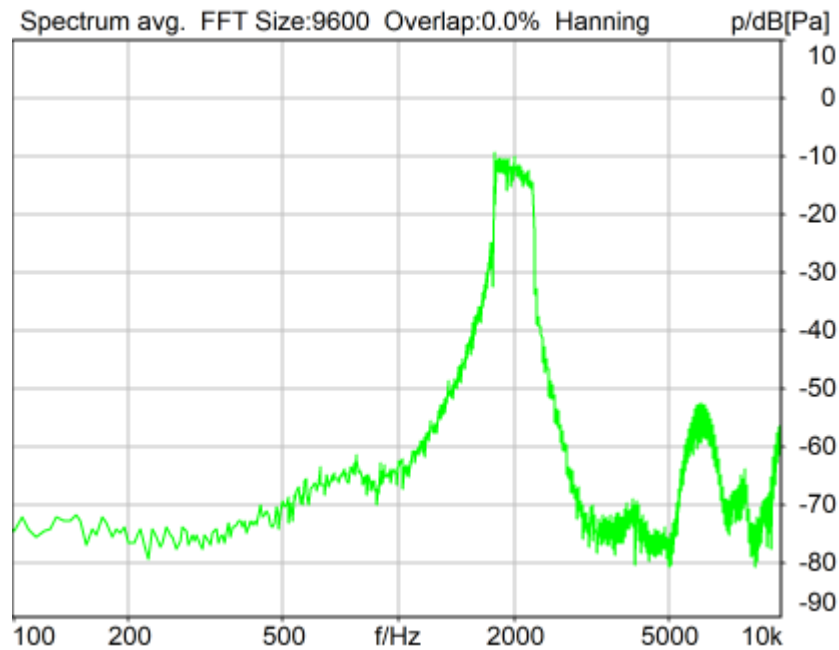
Ok

2024/3/13 23:16 ACQUA 5.1.200

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): 21.68 dB (8.24%) Ok

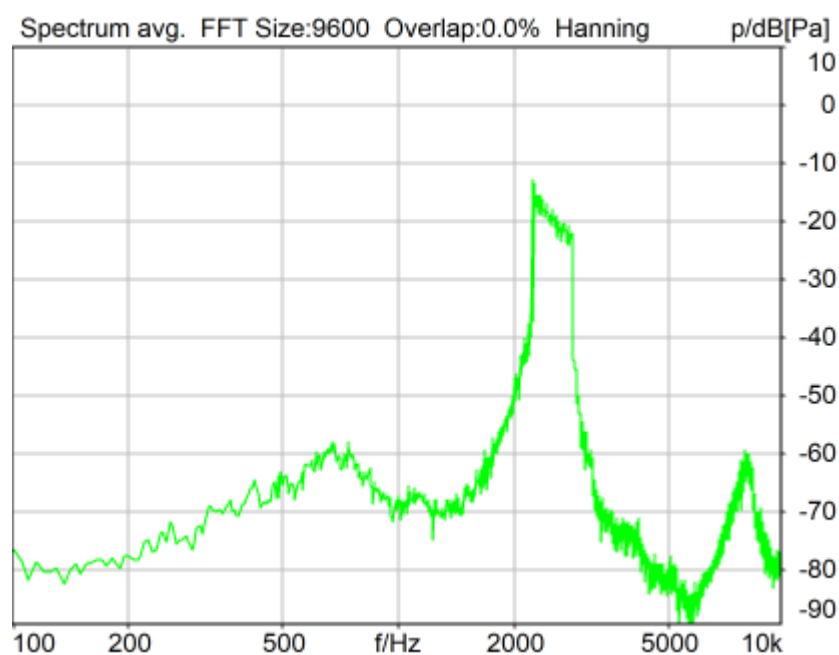
Ok

2024/3/13 23:16 ACQUA 5.1.200

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): 26.50 dB (4.73%) Ok

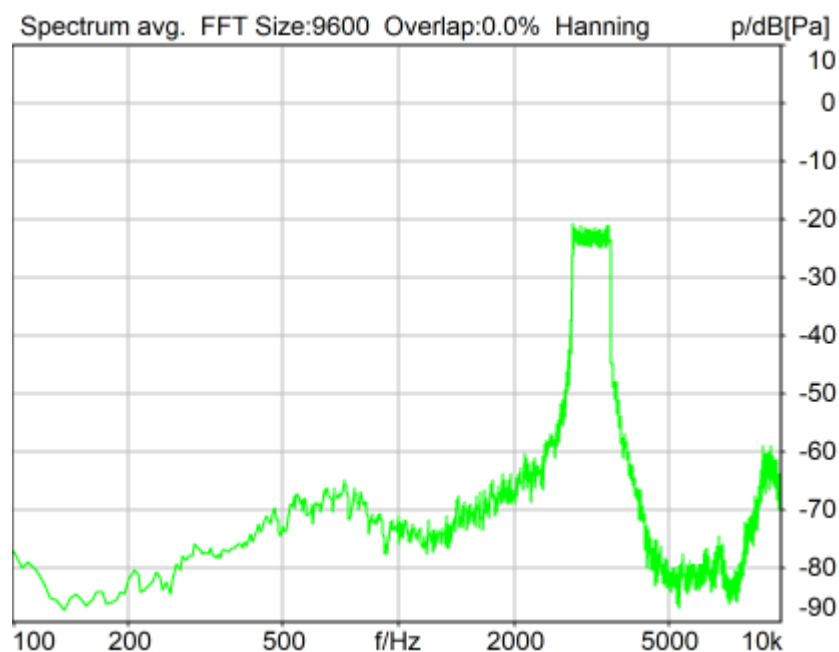
Ok

2024/3/13 23:17 ACQUA 5.1.200

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): 27.96 dB (4.00%) Ok

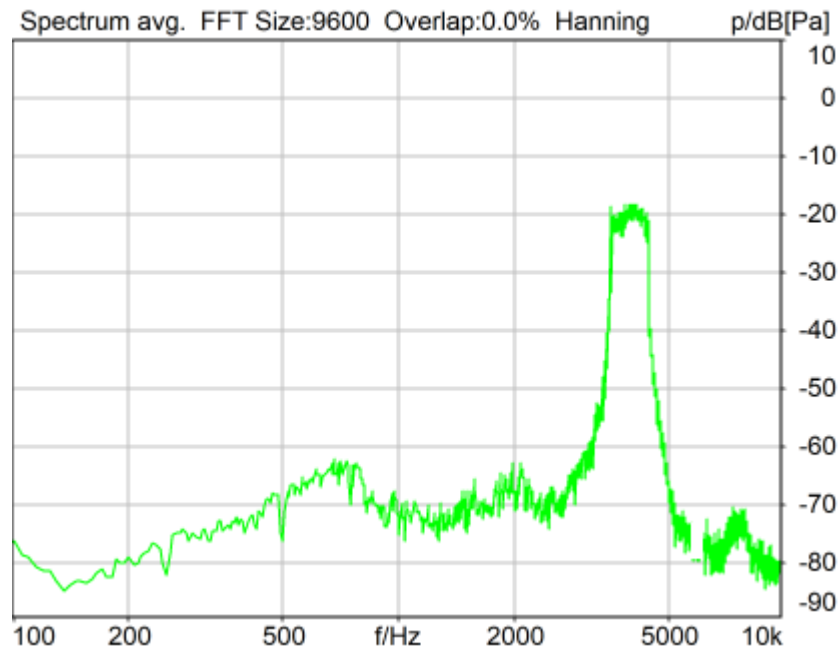
Ok

2024/3/13 23:17 ACQUA 5.1.200

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): 27.73 dB (4.11%) Ok

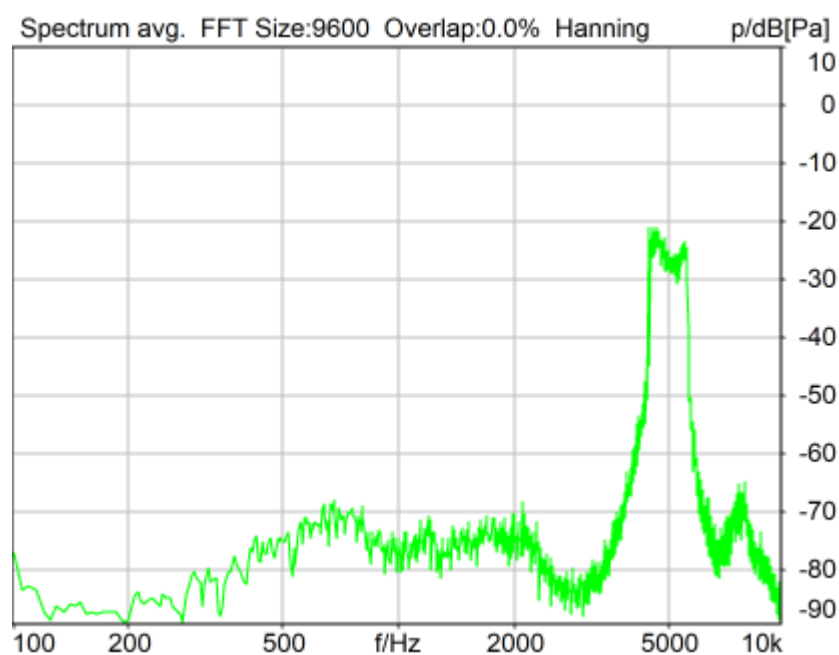
Ok

2024/3/13 23:17 ACQUA 5.1.200

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): 30.06 dB (3.14%) Ok

Ok

2024/3/13 23:18 ACQUA 5.1.200

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	31.39 dB
2	315Hz	31.91 dB
3	400Hz	31.63 dB
4	500Hz	29.16 dB
5	630Hz	31.73 dB
6	800Hz	32.60 dB
7	1000Hz	30.69 dB
8	1250Hz	22.33 dB
9	1600Hz	23.98 dB
10	2000Hz	21.68 dB
11	2500Hz	26.50 dB
12	3150Hz	27.96 dB
13	4000Hz	27.73 dB
14	5000Hz	30.06 dB

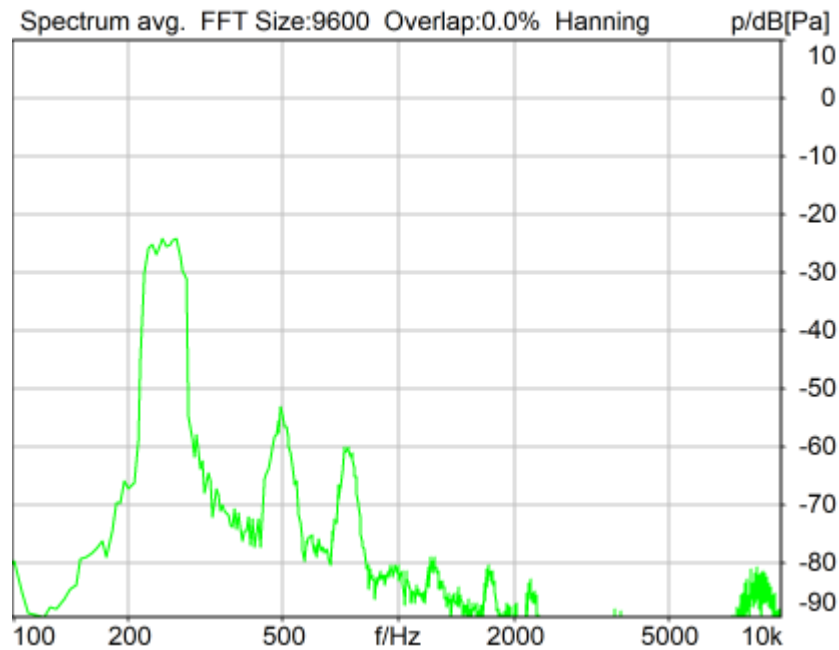
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.68dB at 2000Hz.

2024/3/13 23:18 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): 31.40 dB (2.69%) Ok

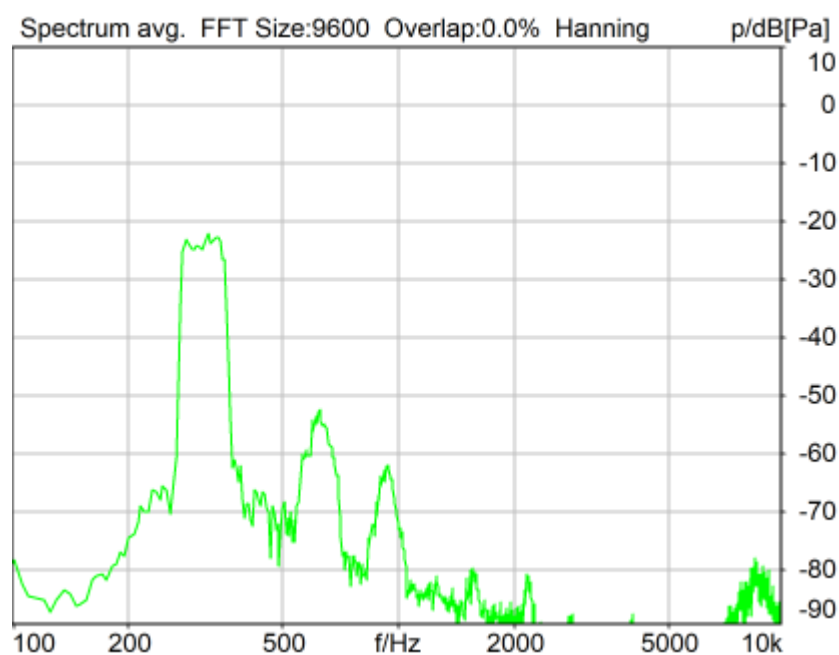
Ok

2024/3/13 22:47 ACQUA 5.1.200

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): 31.42 dB (2.69%) Ok

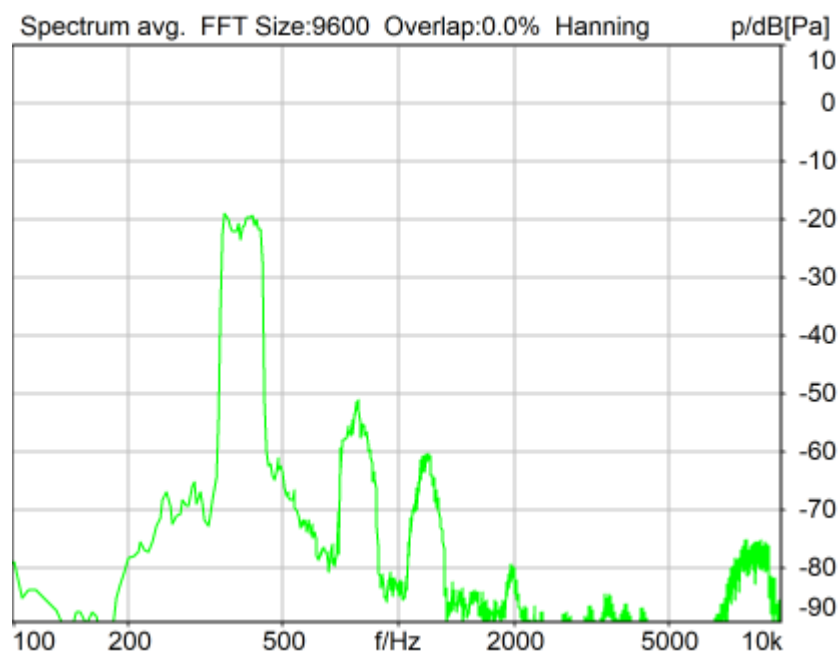
Ok

2024/3/13 22:47 ACQUA 5.1.200

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): 32.48 dB (2.38%) Ok

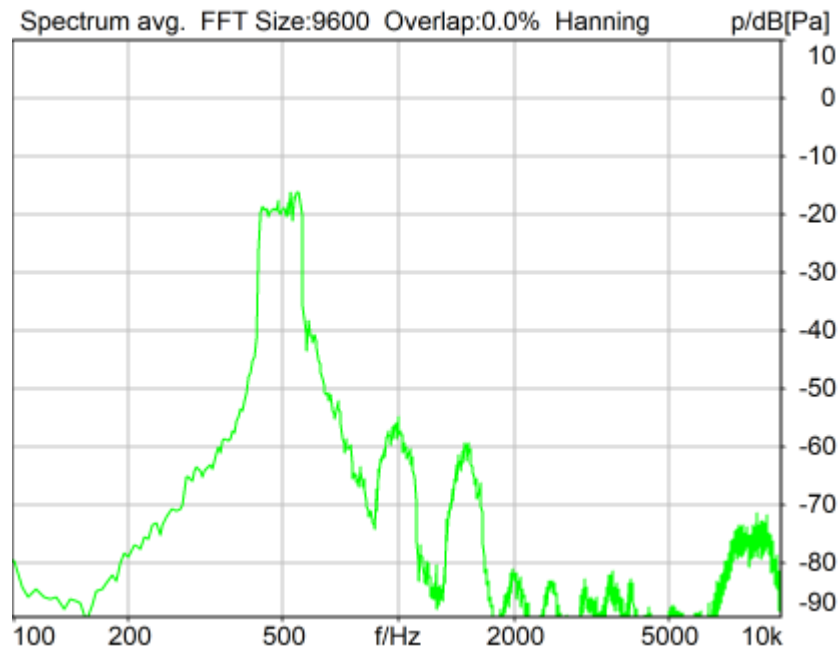
Ok

2024/3/13 22:47 ACQUA 5.1.200

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): 29.48 dB (3.36%) Ok

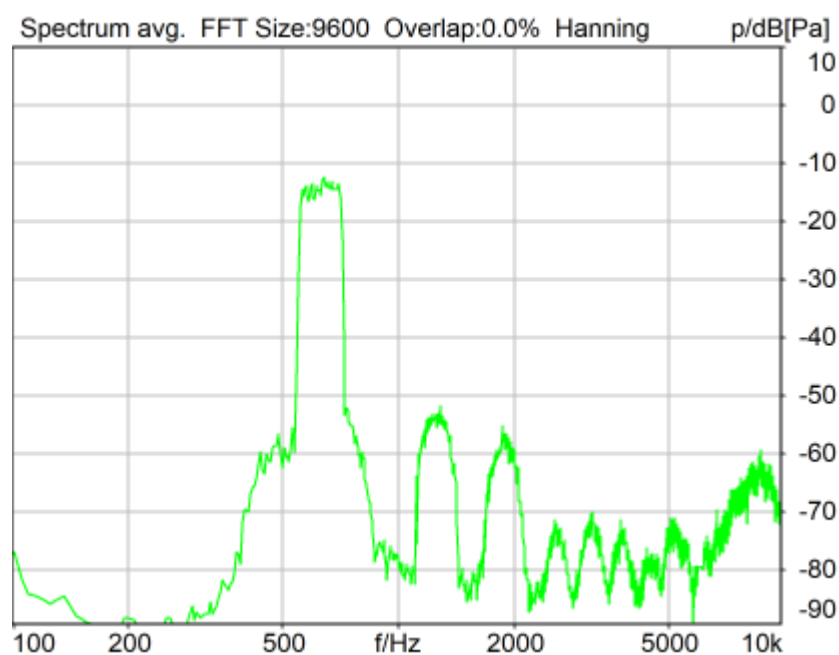
Ok

2024/3/13 22:48 ACQUA 5.1.200

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): 34.38 dB (1.91%) Ok

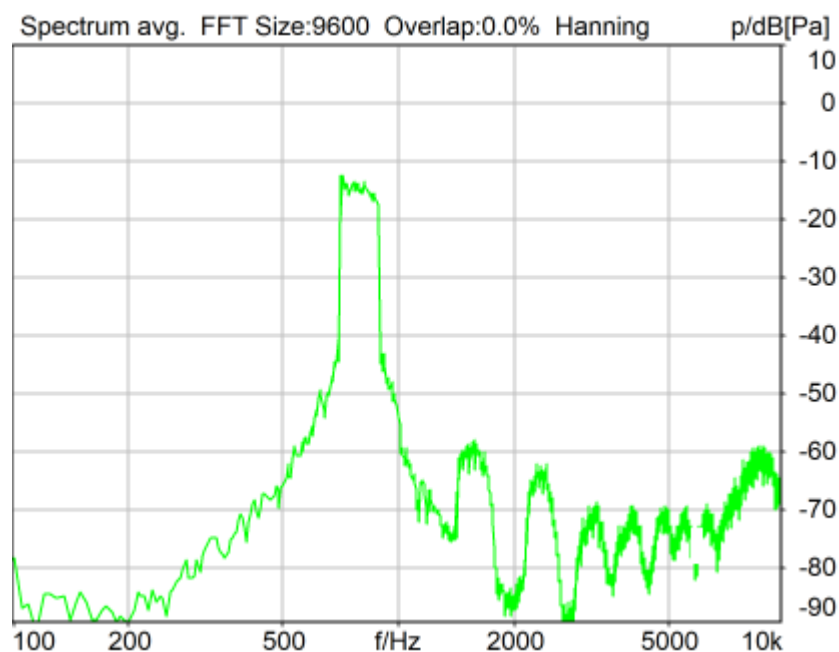
Ok

2024/3/13 22:48 ACQUA 5.1.200

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): 33.35 dB (2.15%) Ok

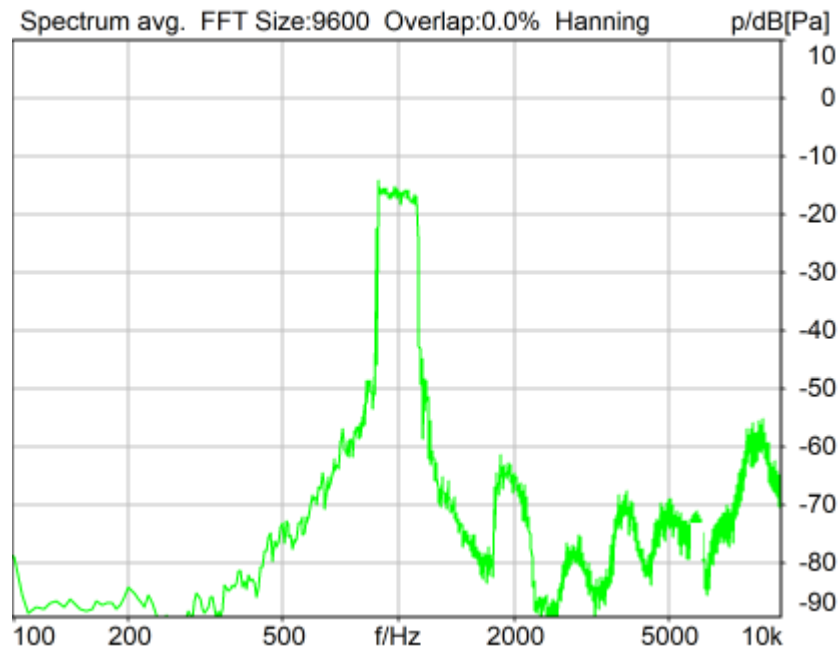
Ok

2024/3/13 22:49 ACQUA 5.1.200

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): 33.43 dB (2.13%) Ok

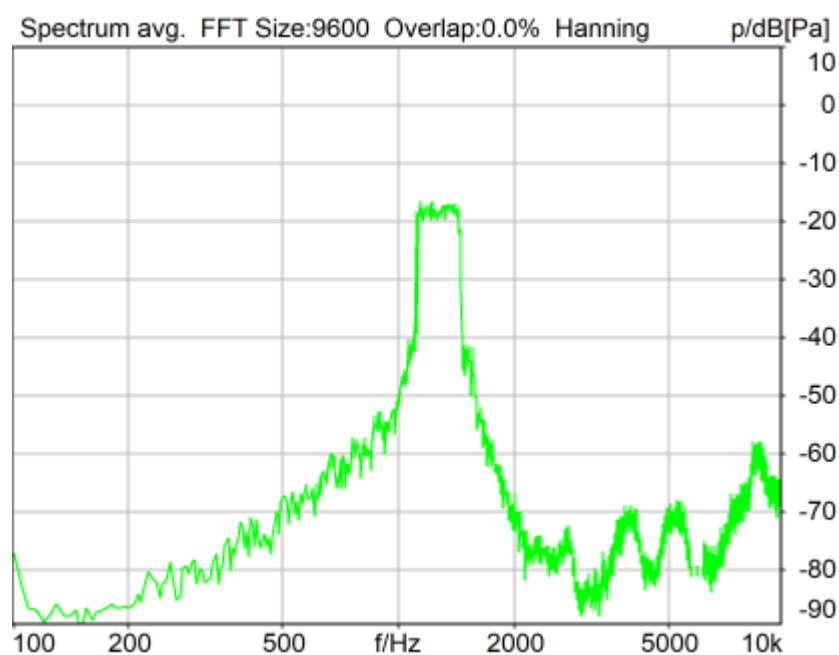
Ok

2024/3/13 22:49 ACQUA 5.1.200

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): 25.34 dB (5.40%) Ok

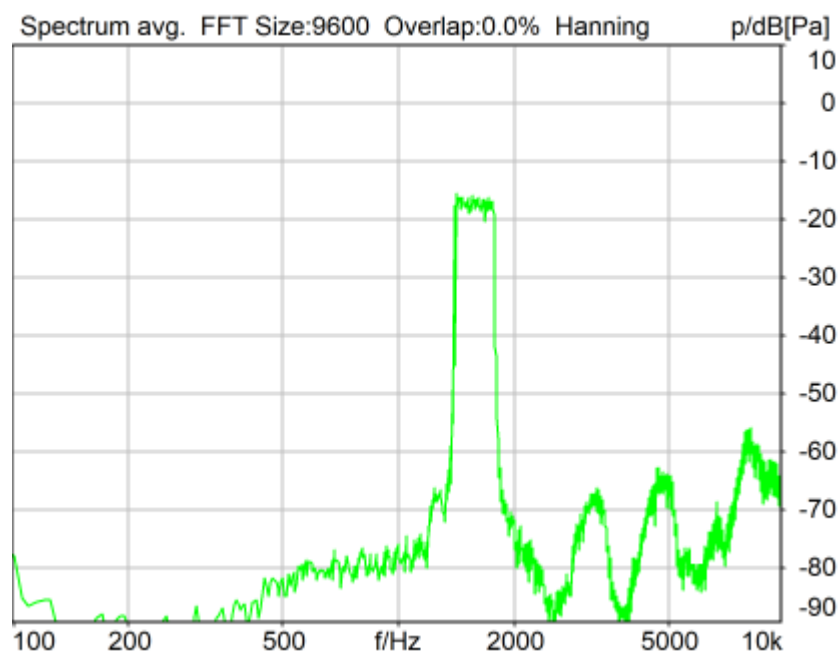
Ok

2024/3/13 22:49 ACQUA 5.1.200

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): 36.26 dB (1.54%) Ok

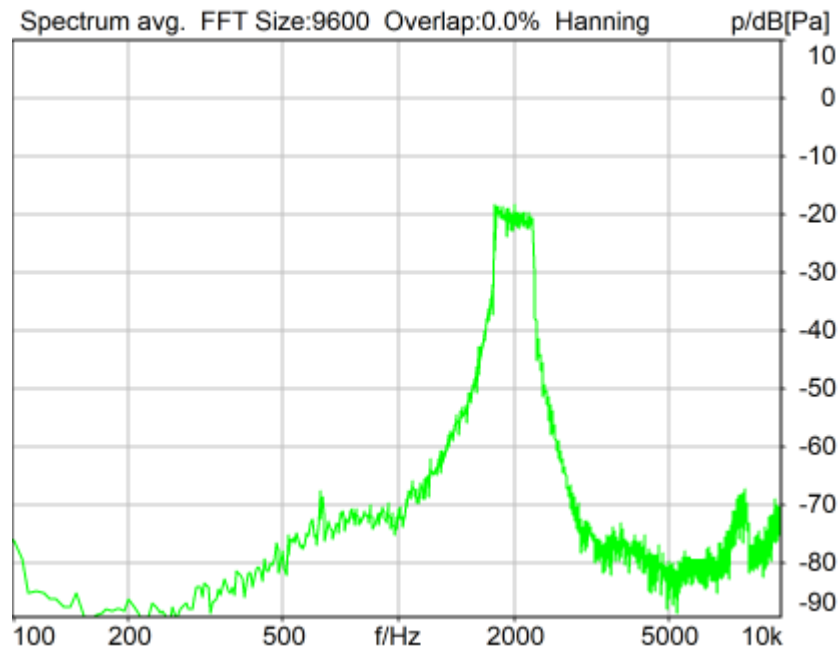
Ok

2024/3/13 22:50 ACQUA 5.1.200

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): 21.96 dB (7.98%) Ok

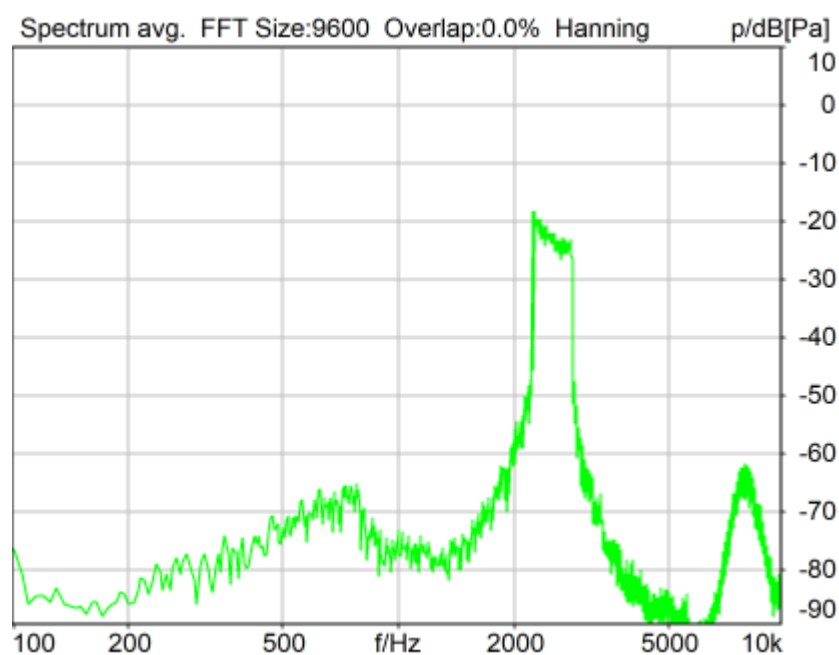
Ok

2024/3/14 0:08 ACQUA 5.1.200

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): 31.77 dB (2.58%) Ok

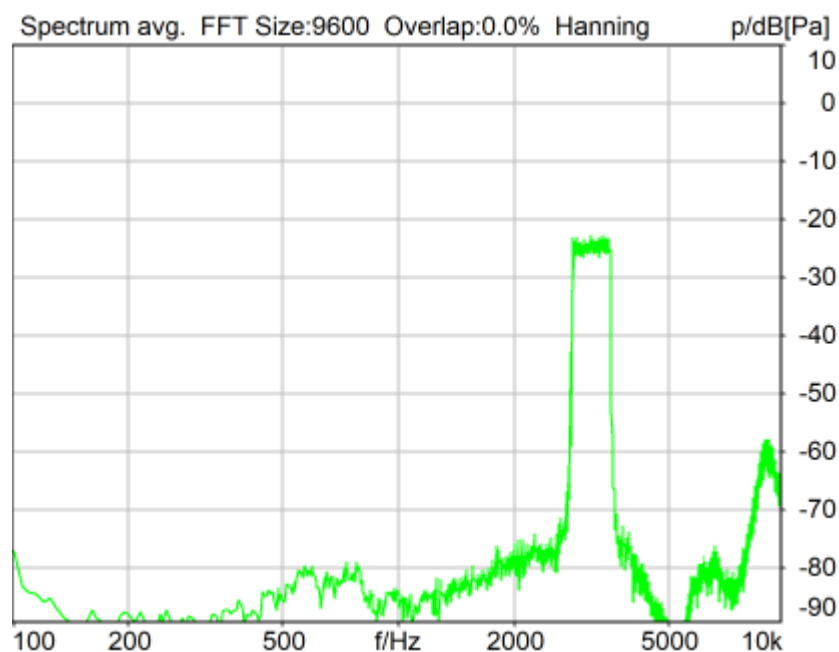
Ok

2024/3/13 22:51 ACQUA 5.1.200

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): 35.84 dB (1.61%) Ok

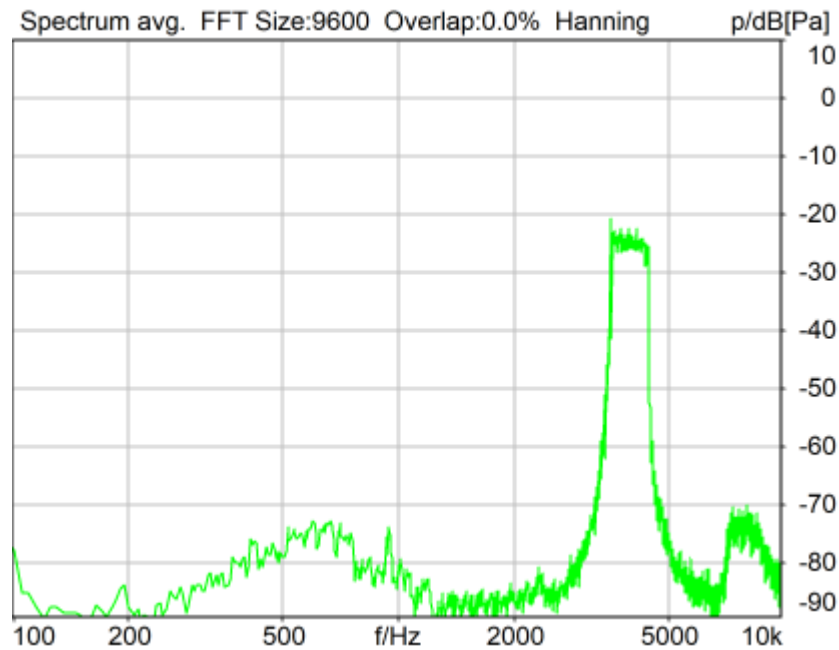
Ok

2024/3/13 22:51 ACQUA 5.1.200

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): 30.97 dB (2.83%) Ok

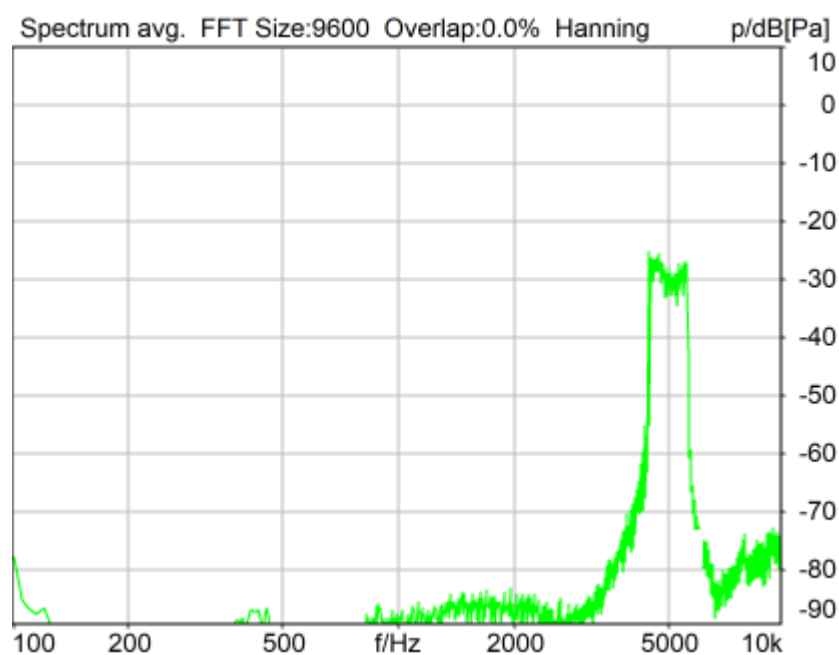
Ok

2024/3/13 22:51 ACQUA 5.1.200

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): 36.04 dB (1.58%) Ok

Ok

2024/3/13 22:52 ACQUA 5.1.200

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	31.39 dB
2	315Hz	31.91 dB
3	400Hz	31.63 dB
4	500Hz	29.16 dB
5	630Hz	31.73 dB
6	800Hz	32.60 dB
7	1000Hz	30.69 dB
8	1250Hz	22.33 dB
9	1600Hz	23.98 dB
10	2500Hz	26.50 dB
11	3150Hz	27.96 dB
12	4000Hz	27.73 dB
13	5000Hz	30.06 dB
14	2000Hz	21.96 dB

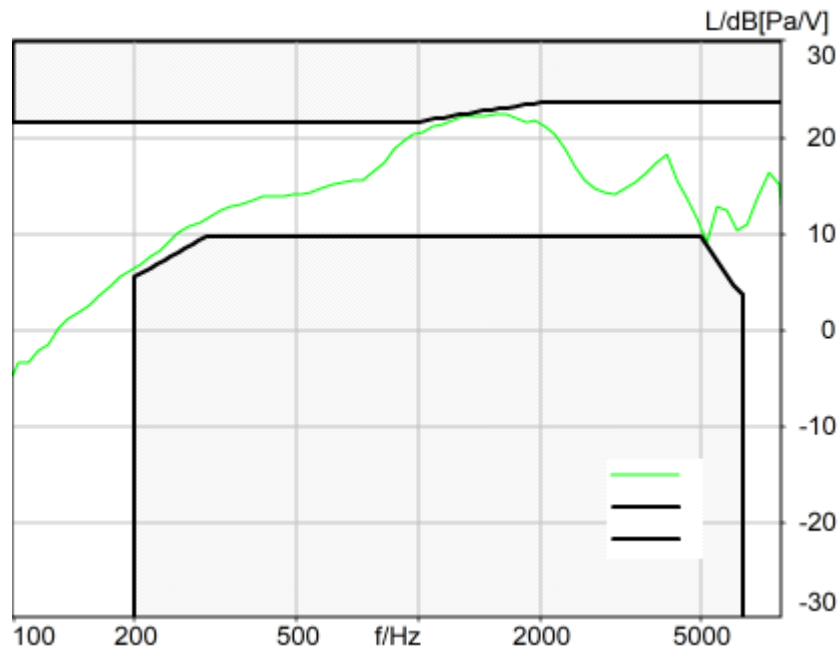
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.96dB at 2000Hz.

2024/3/14 0:08 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



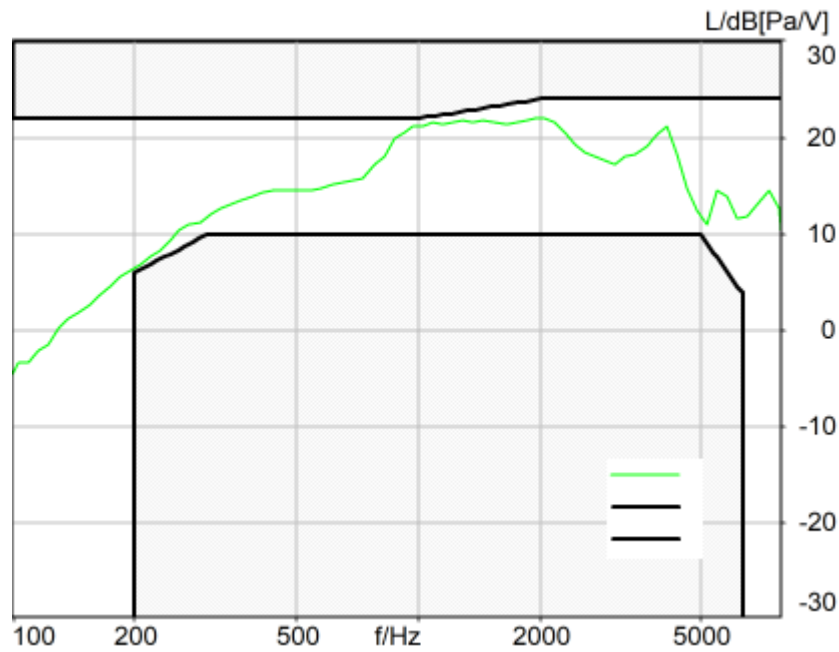
Absolute minimal distance
0.19 dB at 5143.7 Hz Ok

Ok

2024/3/18 9:39 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



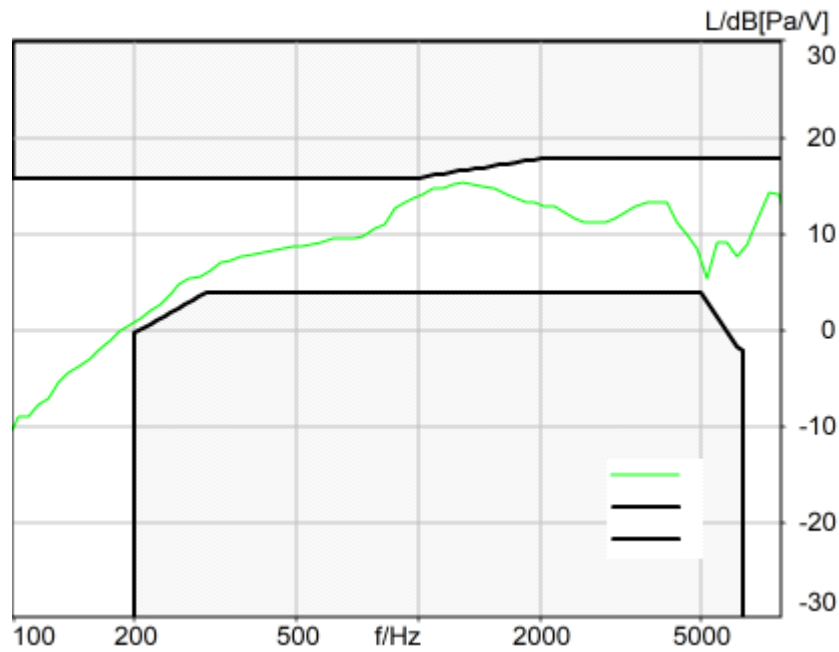
Absolute minimal distance
0.65 dB at 1088.7 Hz Ok

Ok

2024/3/18 9:39 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



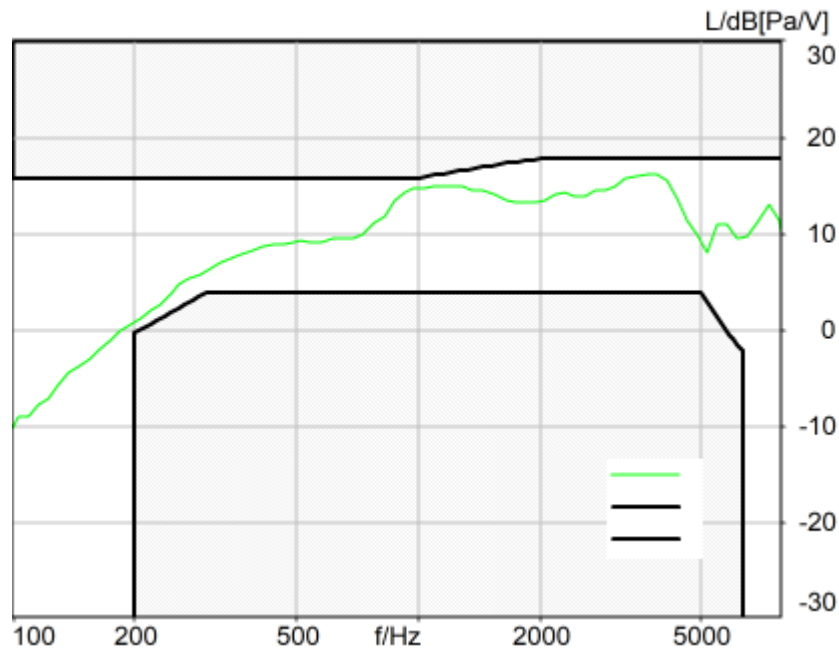
Absolute minimal distance
1.18 dB at 1216.1 Hz Ok

Ok

2024/3/18 10:24 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

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



Absolute minimal distance
1.17 dB at 1088.7 Hz Ok

Ok

2024/3/18 10:24 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

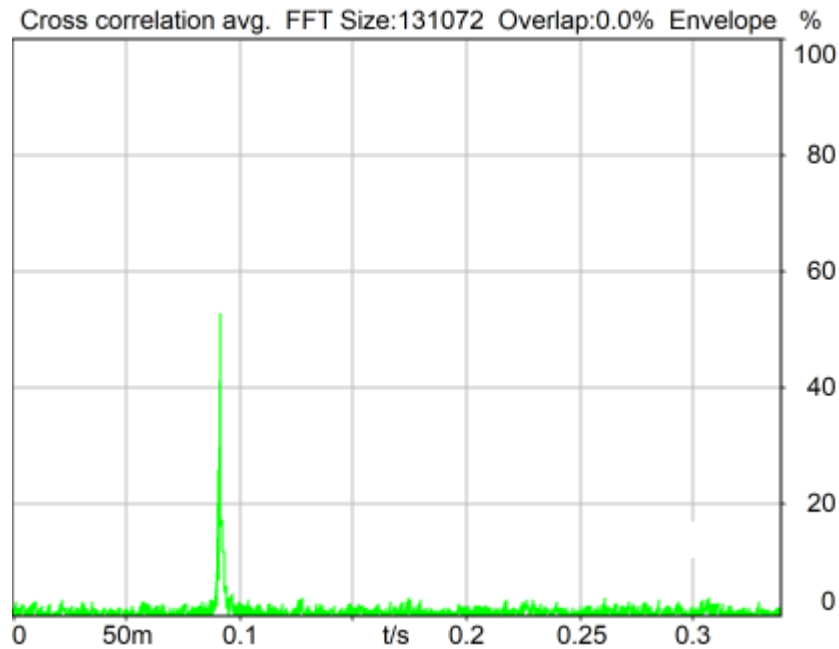
Measurement Object	LTE Band 71_20QPSK_100_0_EVS NB 24.4kbps_CH133322
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:09
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



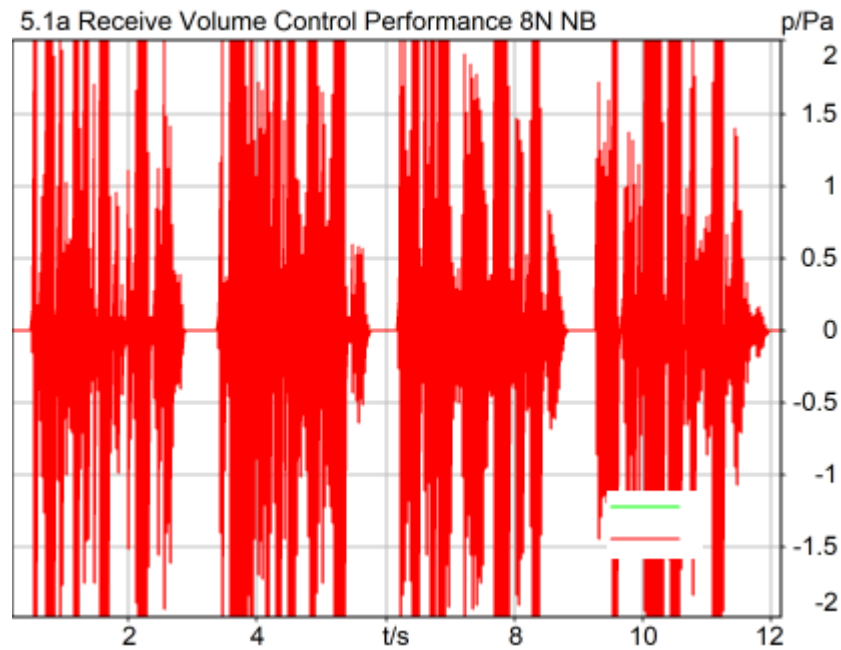
Delay (Cross): 91.9 ms

2024/3/13 21:01 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 91.16 dB[SPL], Act.: 82.36%

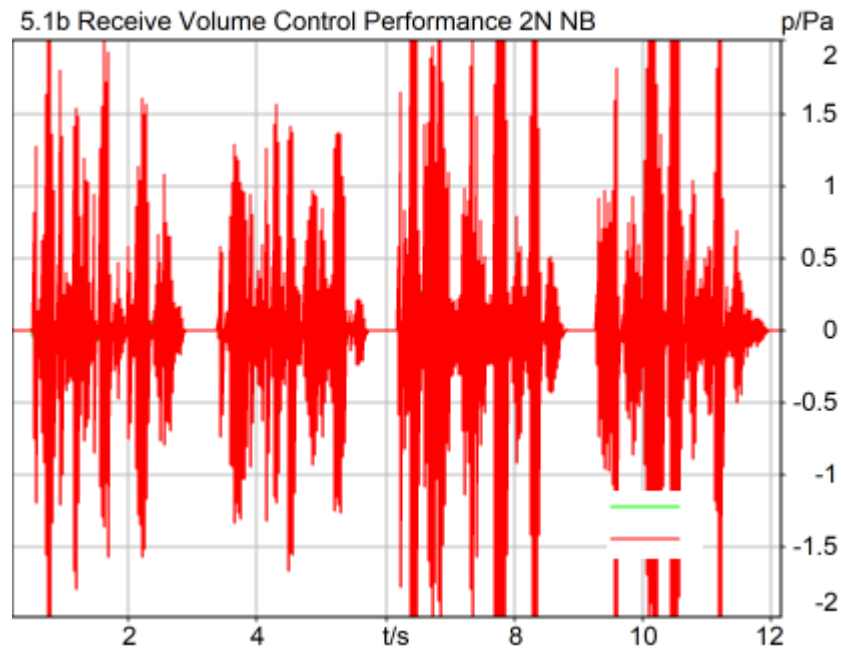
Corrected Speech Level: 21.16 dB[SPL] Ok

Ok

2024/3/13 21:02 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 84.75 dB[SPL], Act.: 80.83%

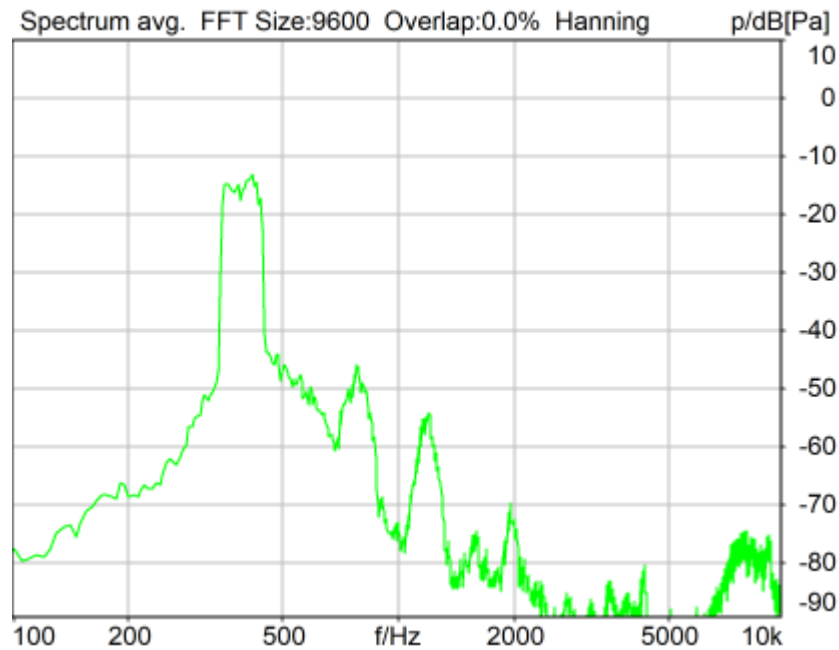
Corrected Speech Level: 14.75 dB[SPL] Ok

Ok

2024/3/13 22:31 ACQUA 5.1.200

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): 30.31 dB (3.05%) Ok

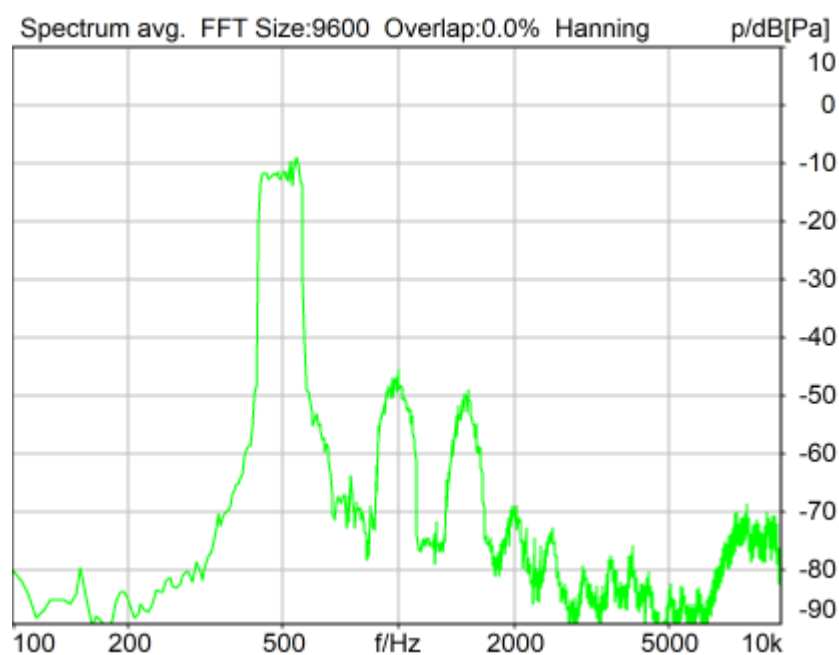
Ok

2024/3/13 21:02 ACQUA 5.1.200

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): 33.65 dB (2.08%) Ok

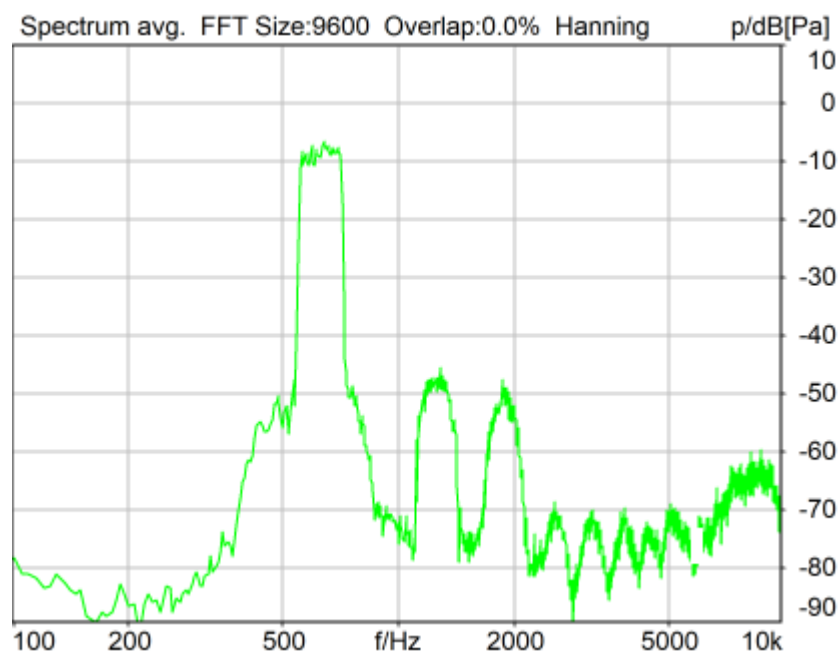
Ok

2024/3/13 21:03 ACQUA 5.1.200

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): 34.74 dB (1.83%) Ok

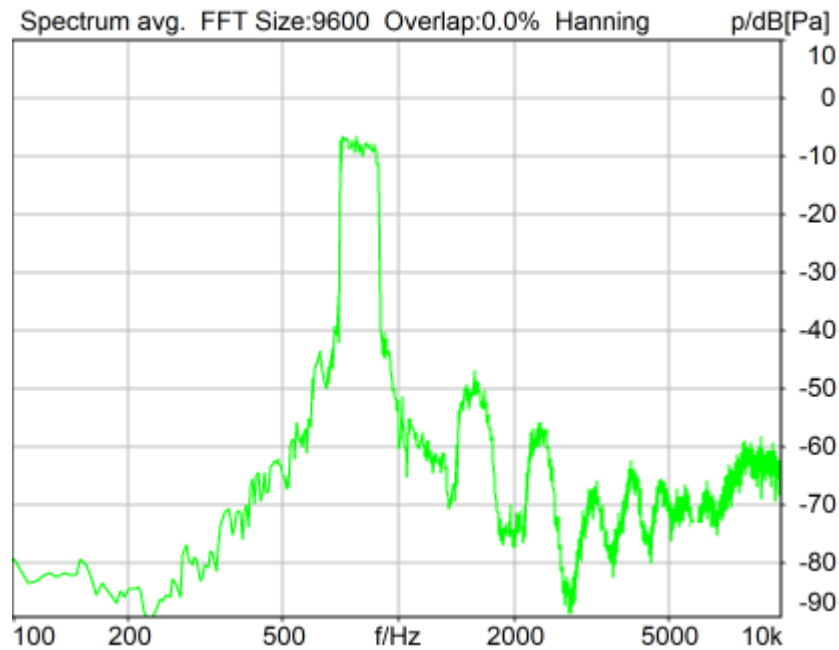
Ok

2024/3/13 21:03 ACQUA 5.1.200

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): 35.45 dB (1.69%) Ok

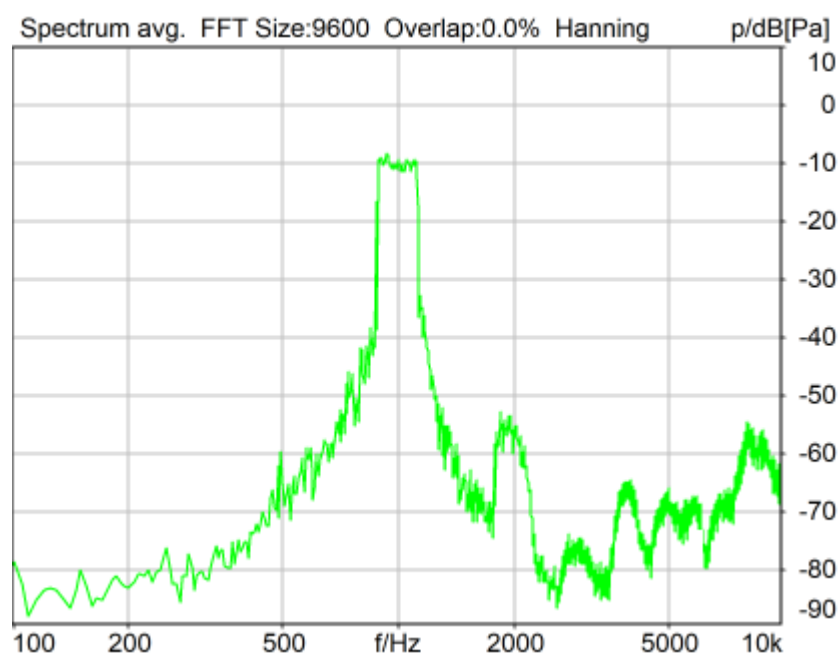
Ok

2024/3/13 21:03 ACQUA 5.1.200

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): 32.47 dB (2.38%) Ok

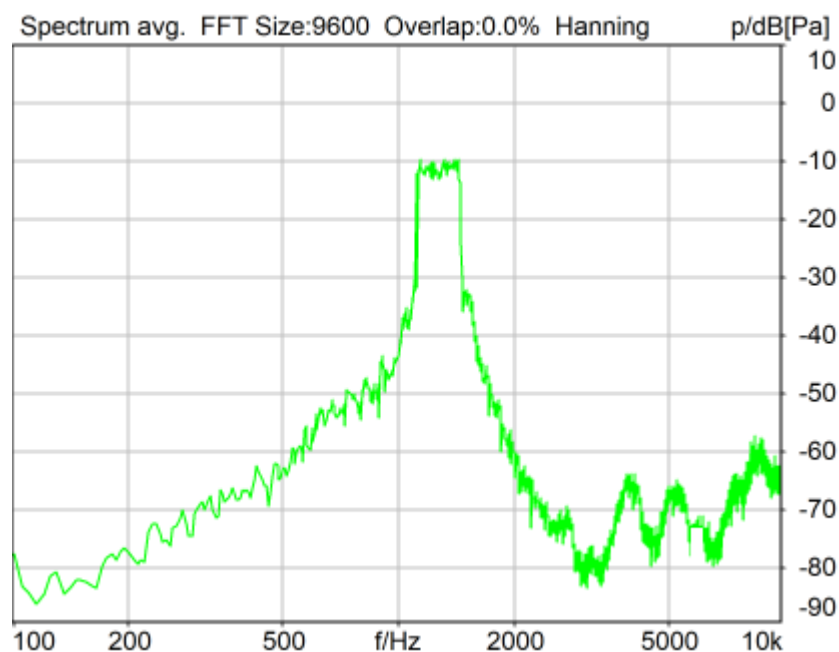
Ok

2024/3/13 21:04 ACQUA 5.1.200

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): 23.72 dB (6.51%) Ok

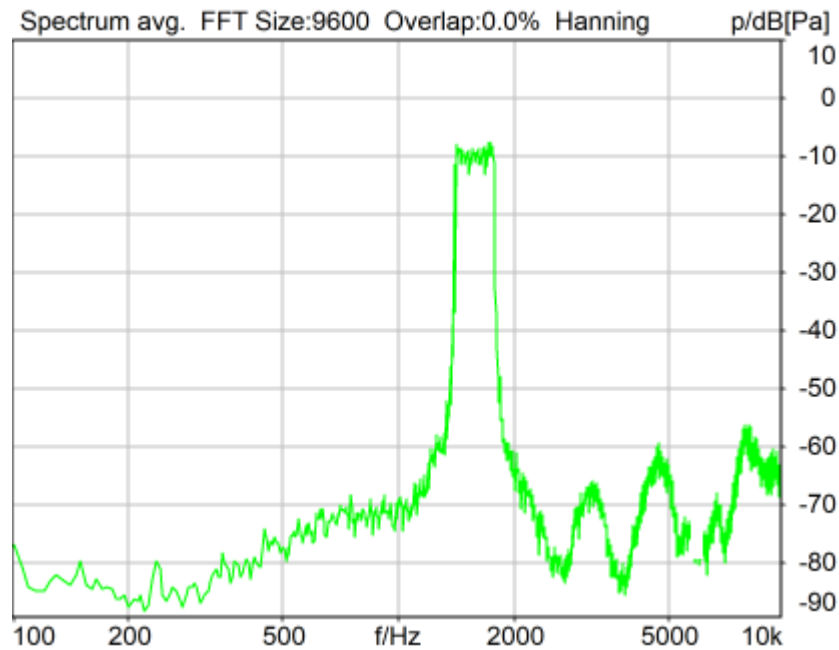
Ok

2024/3/13 21:04 ACQUA 5.1.200

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): 41.60 dB (0.83%) Ok

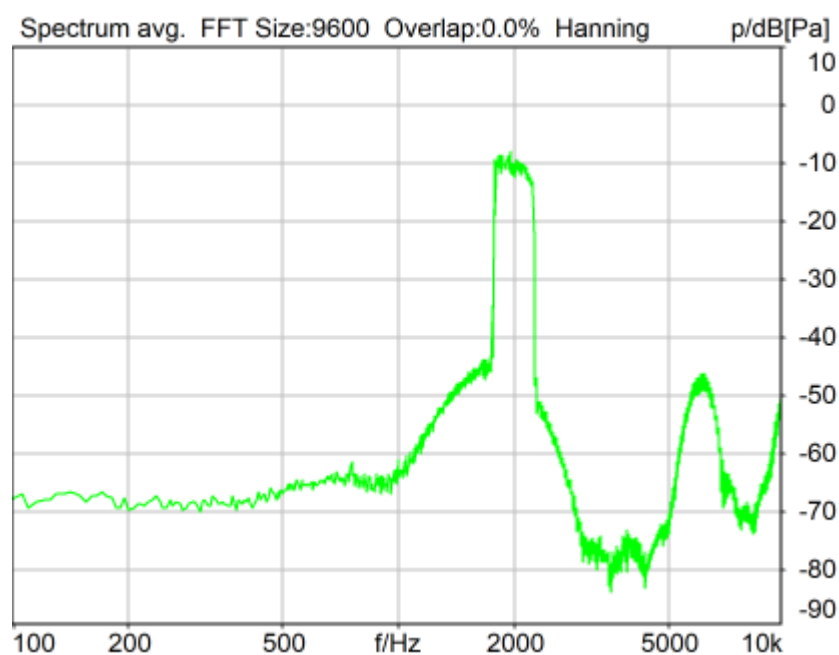
Ok

2024/3/13 21:05 ACQUA 5.1.200

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): 30.72 dB (2.91%) Ok

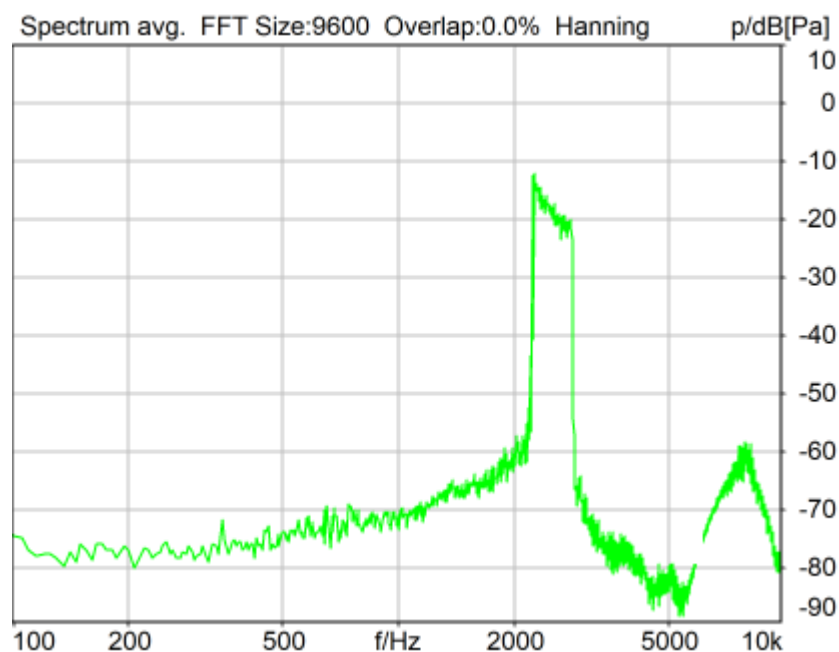
Ok

2024/3/13 21:05 ACQUA 5.1.200

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): 37.04 dB (1.41%) Ok

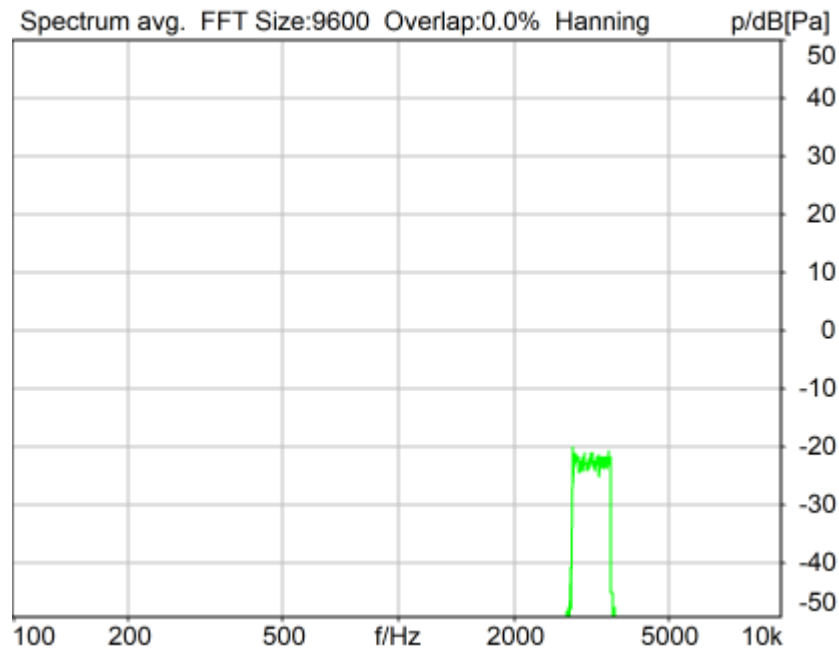
Ok

2024/3/13 21:05 ACQUA 5.1.200

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): 29.31 dB (3.42%) Ok

Ok

2024/3/13 21:06 ACQUA 5.1.200

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

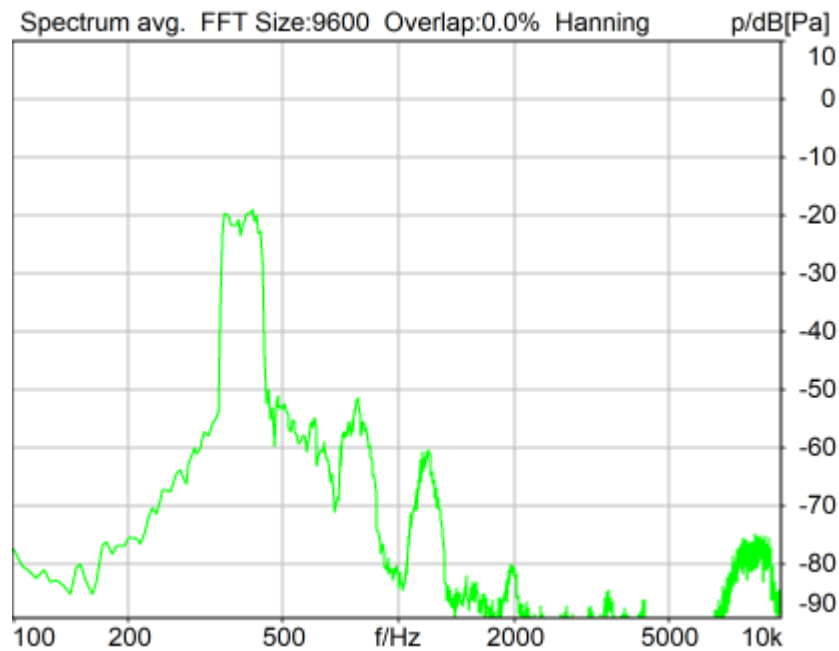
Region	Frequency	SDNR
1	400Hz	30.31 dB
2	500Hz	33.65 dB
3	630Hz	34.74 dB
4	800Hz	35.45 dB
5	1000Hz	32.47 dB
6	1250Hz	23.72 dB
7	1600Hz	41.60 dB
8	2000Hz	30.72 dB
9	2500Hz	37.04 dB
10	3150Hz	29.31 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.72dB at 1250Hz.

2024/3/13 21:06 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): 30.73 dB (2.91%) Ok

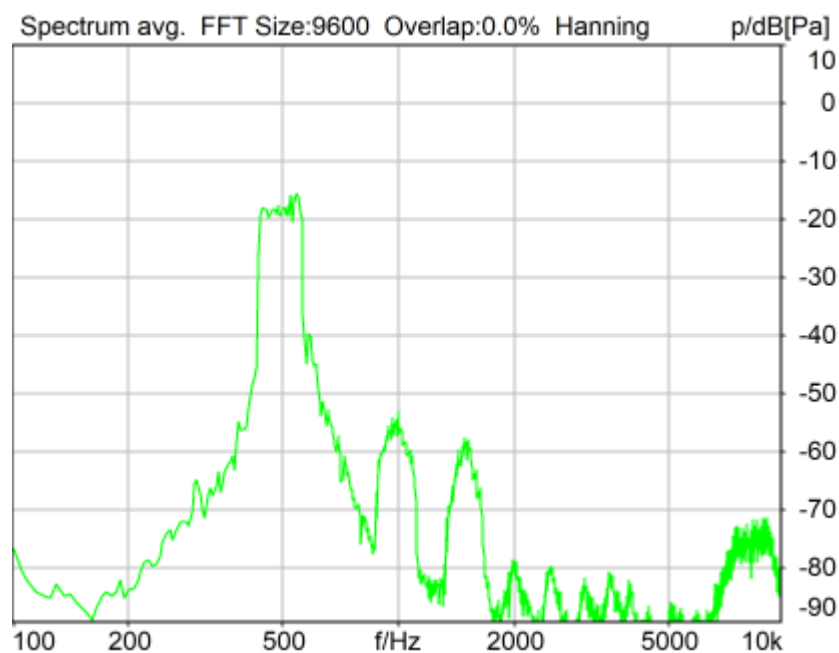
Ok

2024/3/13 22:31 ACQUA 5.1.200

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): 32.00 dB (2.51%) Ok

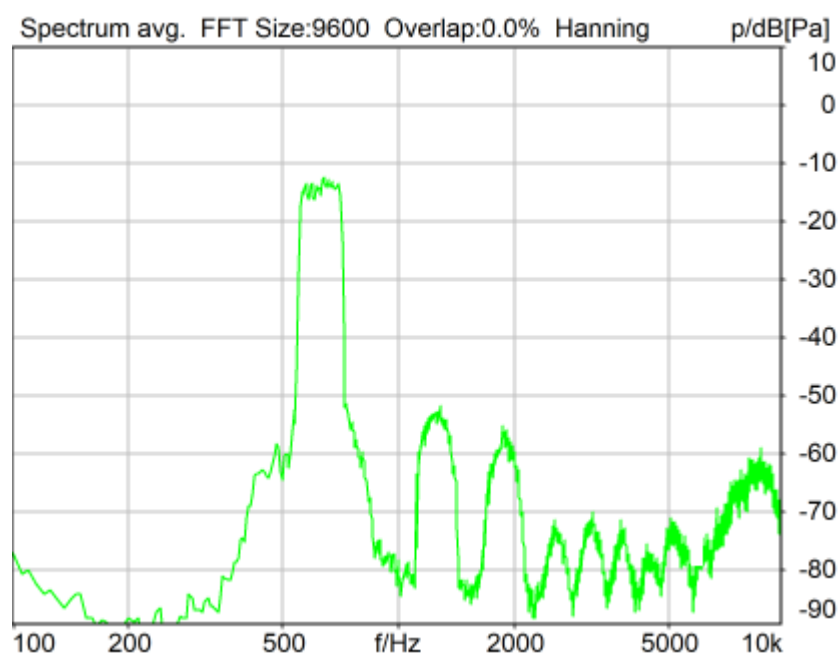
Ok

2024/3/13 22:32 ACQUA 5.1.200

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): 34.20 dB (1.95%) Ok

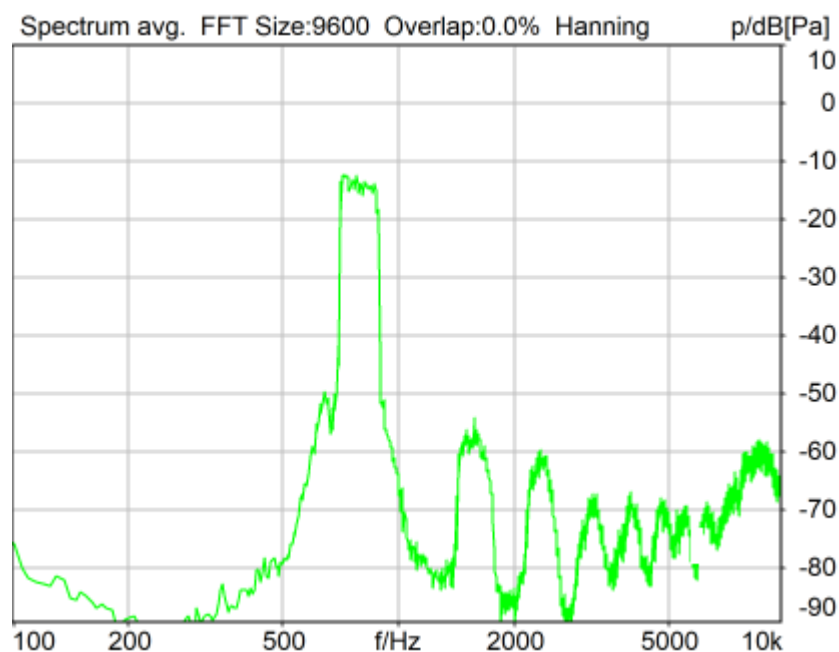
Ok

2024/3/13 22:32 ACQUA 5.1.200

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): 34.84 dB (1.81%) Ok

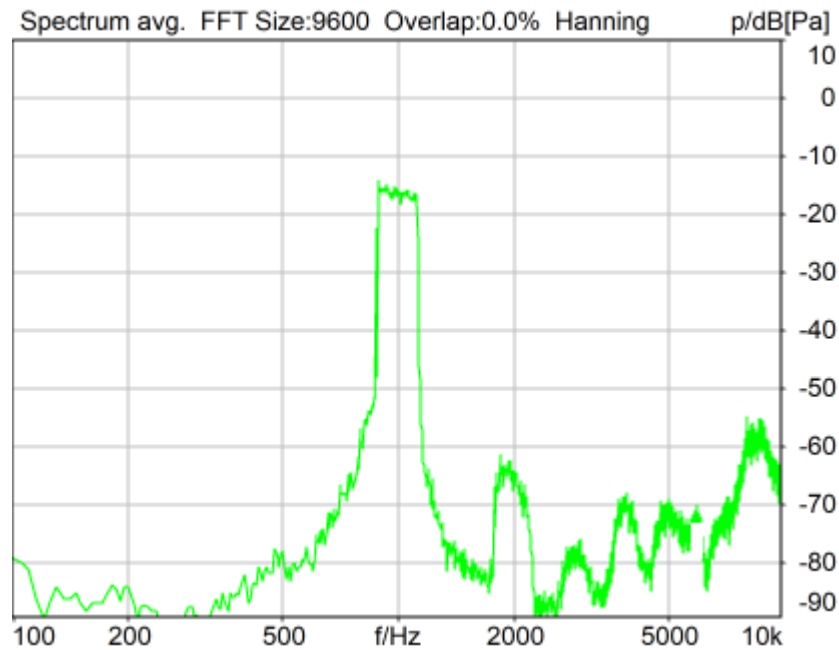
Ok

2024/3/13 22:32 ACQUA 5.1.200

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): 34.50 dB (1.88%) Ok

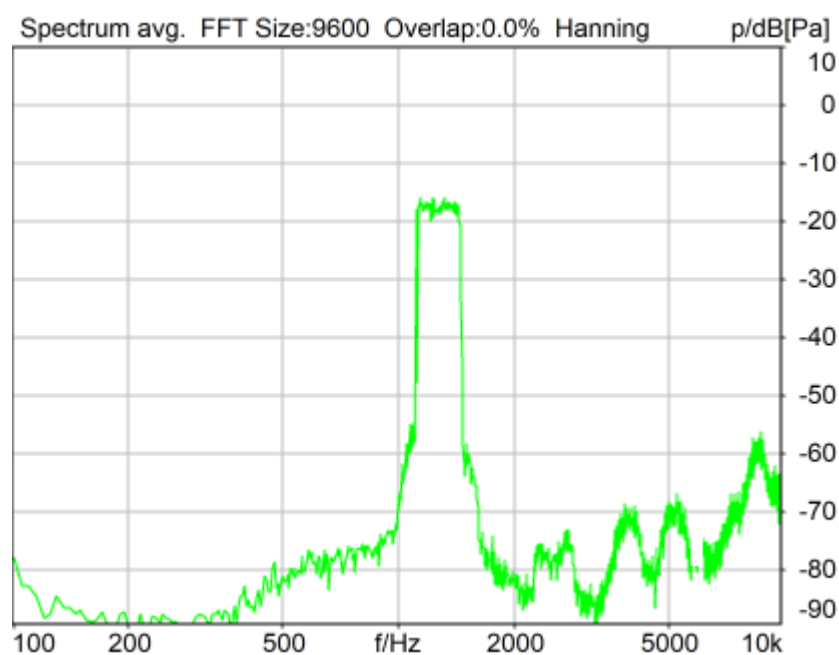
Ok

2024/3/13 22:33 ACQUA 5.1.200

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): 31.62 dB (2.62%) Ok

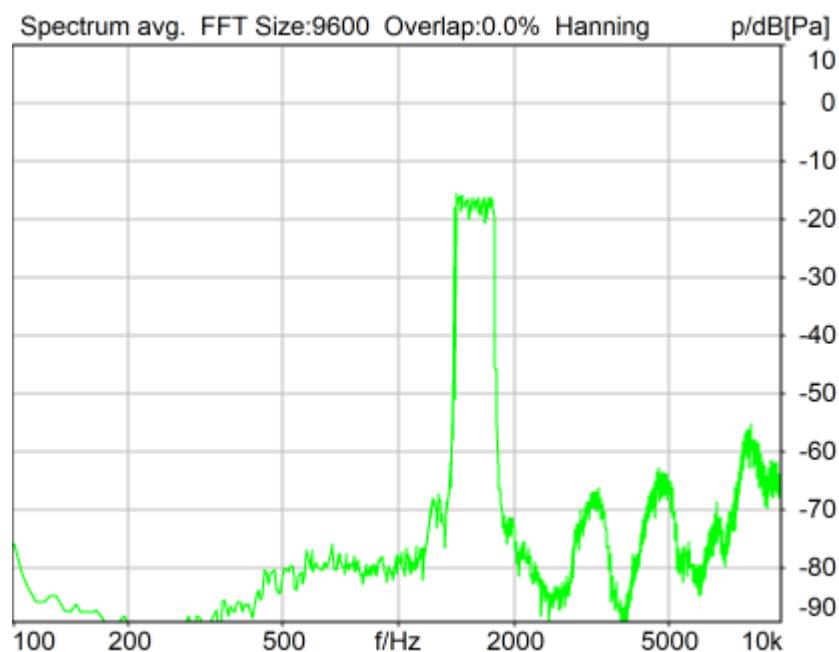
Ok

2024/3/13 22:33 ACQUA 5.1.200

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): 36.28 dB (1.53%) Ok

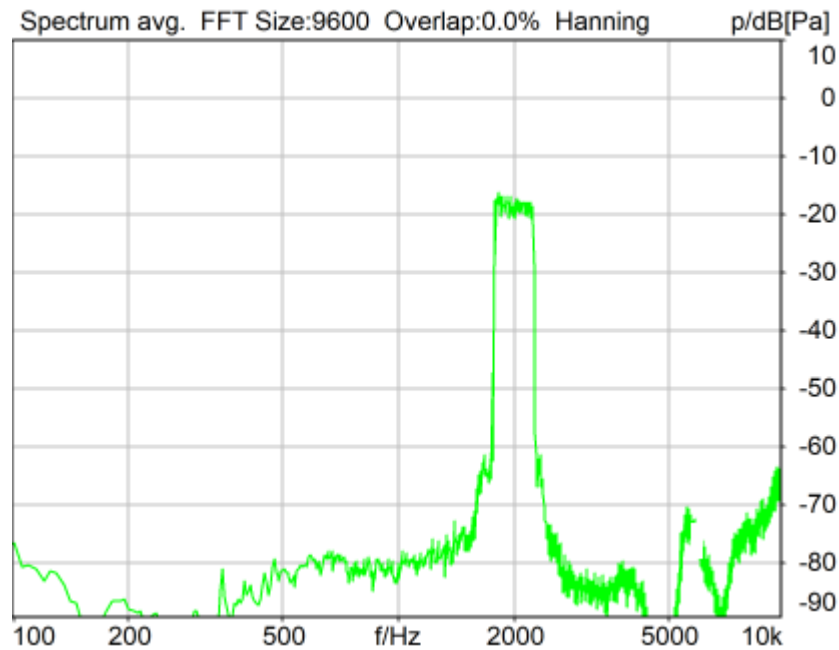
Ok

2024/3/13 22:34 ACQUA 5.1.200

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): 42.77 dB (0.73%) Ok

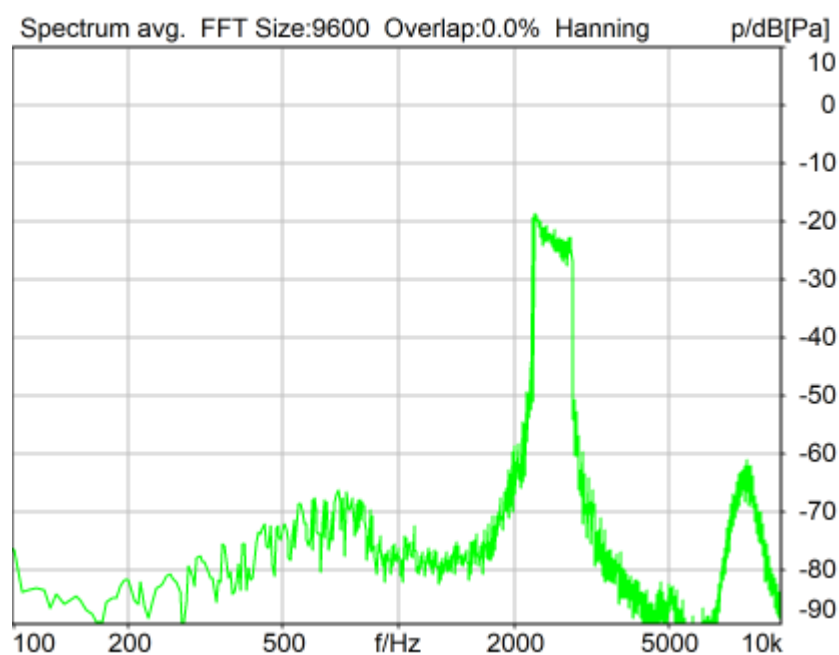
Ok

2024/3/13 22:34 ACQUA 5.1.200

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): 33.83 dB (2.03%) Ok

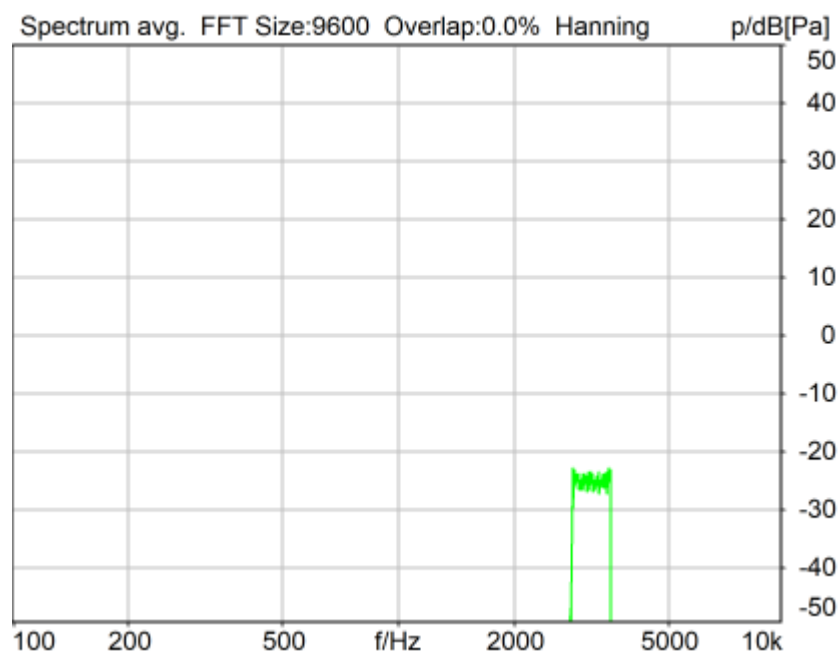
Ok

2024/3/13 22:34 ACQUA 5.1.200

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): 30.05 dB (3.14%) Ok

Ok

2024/3/13 22:35 ACQUA 5.1.200

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	30.73 dB

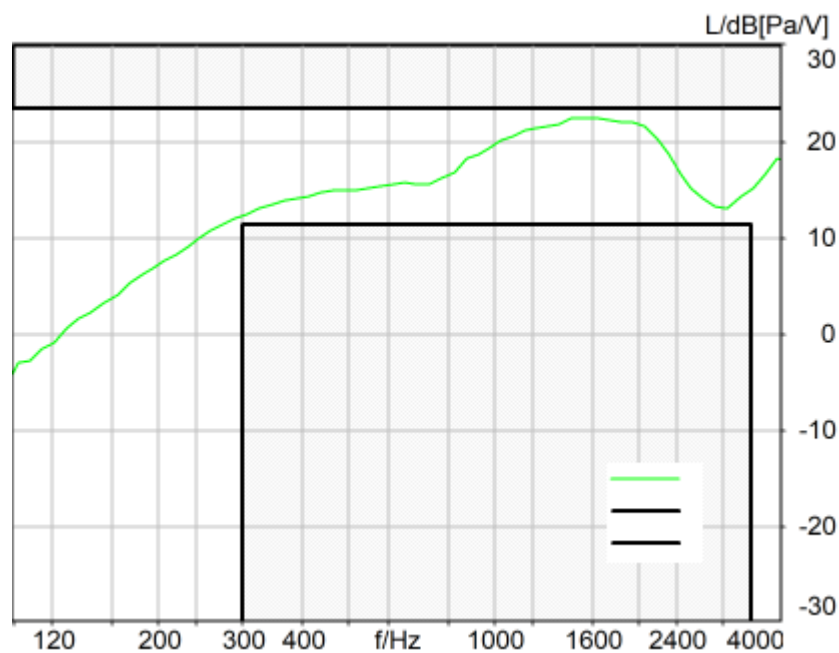
2	500Hz	32.00 dB
3	630Hz	34.20 dB
4	800Hz	34.84 dB
5	1000Hz	34.50 dB
6	1250Hz	31.62 dB
7	1600Hz	36.28 dB
8	2000Hz	42.77 dB
9	2500Hz	33.83 dB
10	3150Hz	30.05 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 30.05dB at 3150Hz.

2024/3/13 22:35 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



Absolute minimal distance
1.00 dB at 1547.5 Hz Ok

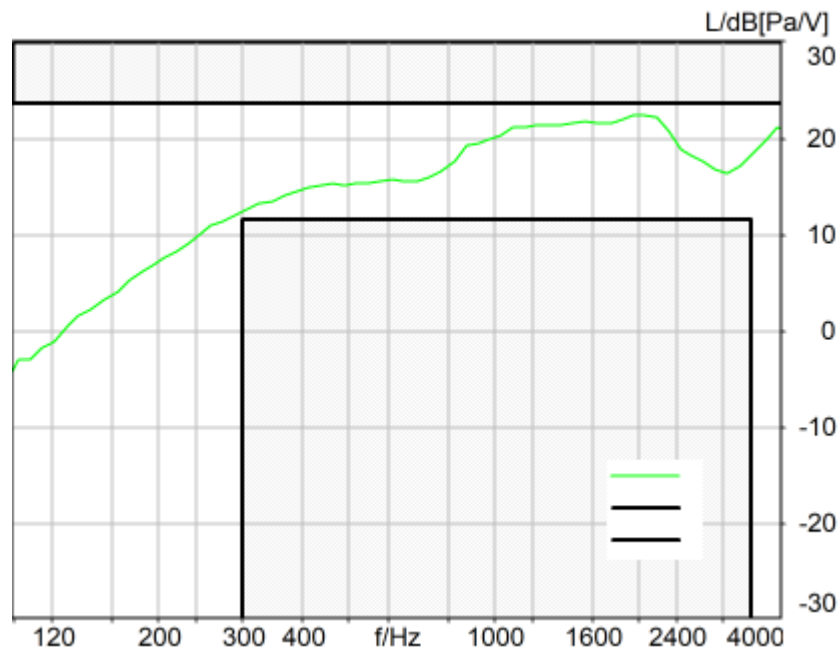
Ok

2024/3/13 21:08 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



Absolute minimal distance

1.11 dB at 2057.5 Hz Ok

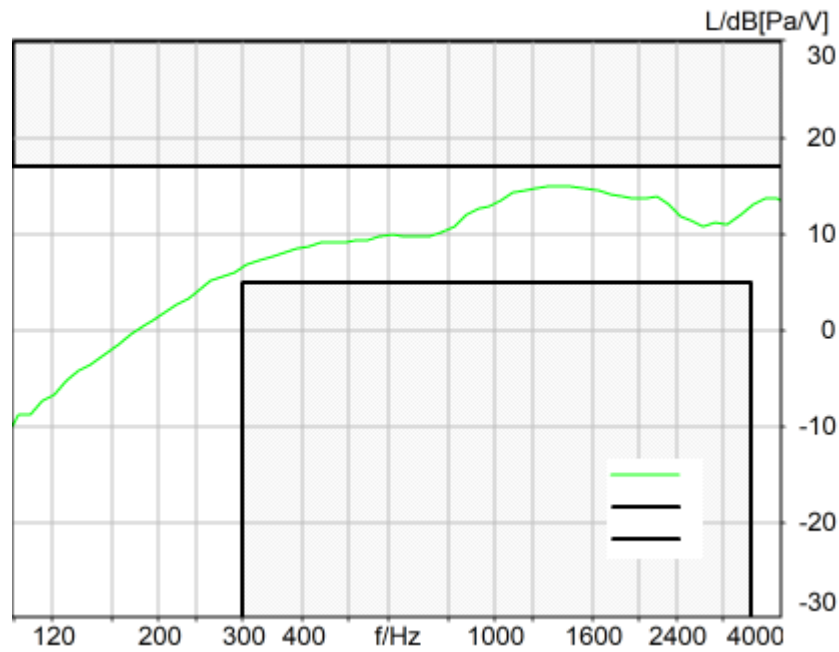
Ok

2024/3/13 21:07 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



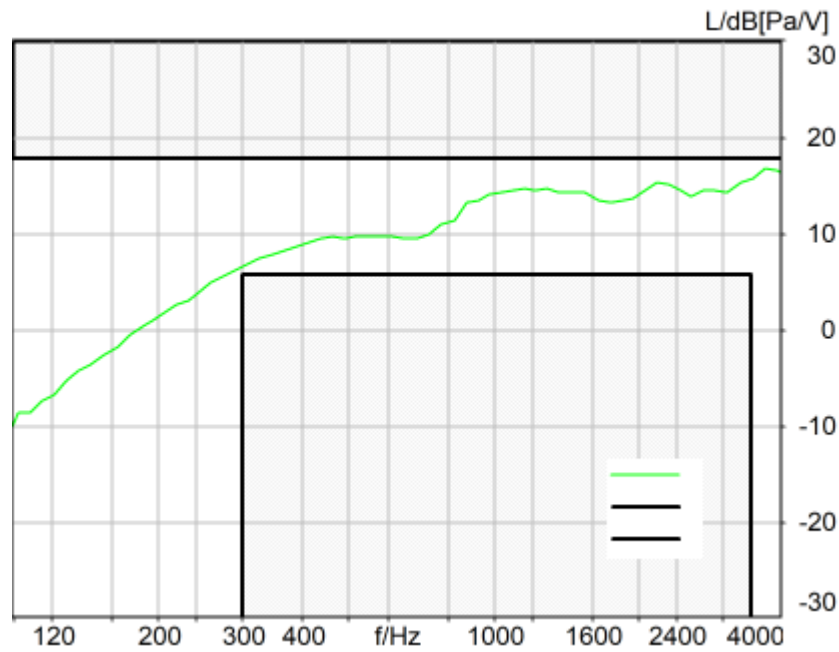
Absolute minimal distance
1.90 dB at 1285.9 Hz Ok

Ok

2024/3/13 22:36 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
1.05 dB at 3657.5 Hz Ok

Ok

2024/3/13 22:36 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

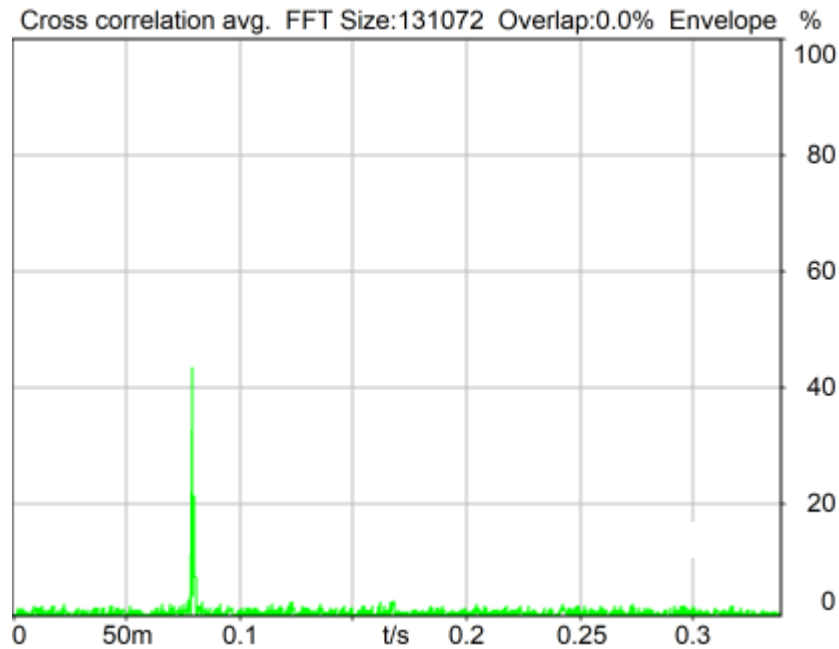
Measurement Object	LTE Band 71_20QPSK_100_0_EVS WB128kbps_CH133322
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:10
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



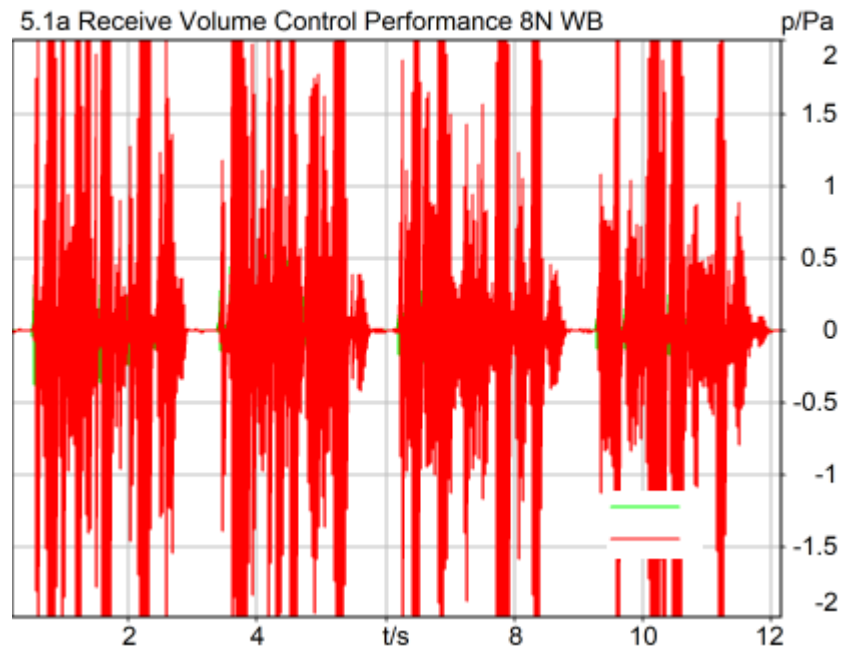
Delay (Cross): 79.4 ms

2024/3/13 22:39 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.44 dB[SPL], Act.: 83.99%

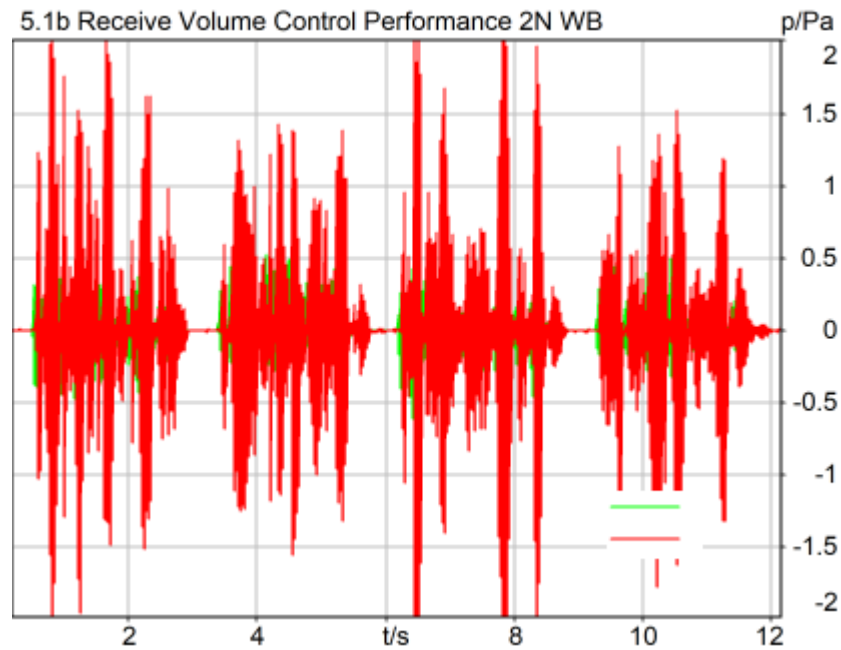
Corrected Speech Level: 17.44 dB[SPL] Ok

Ok

2024/3/18 9:44 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 81.13 dB[SPL], Act.: 84.00%

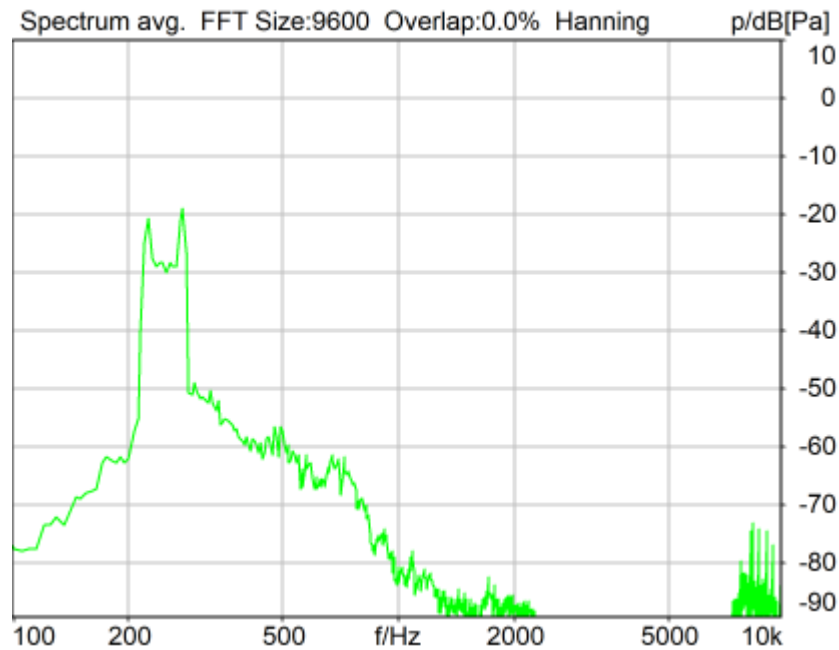
Corrected Speech Level: 11.13 dB[SPL] Ok

Ok

2024/3/18 10:23 ACQUA 5.1.200

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): 30.41 dB (3.02%) Ok

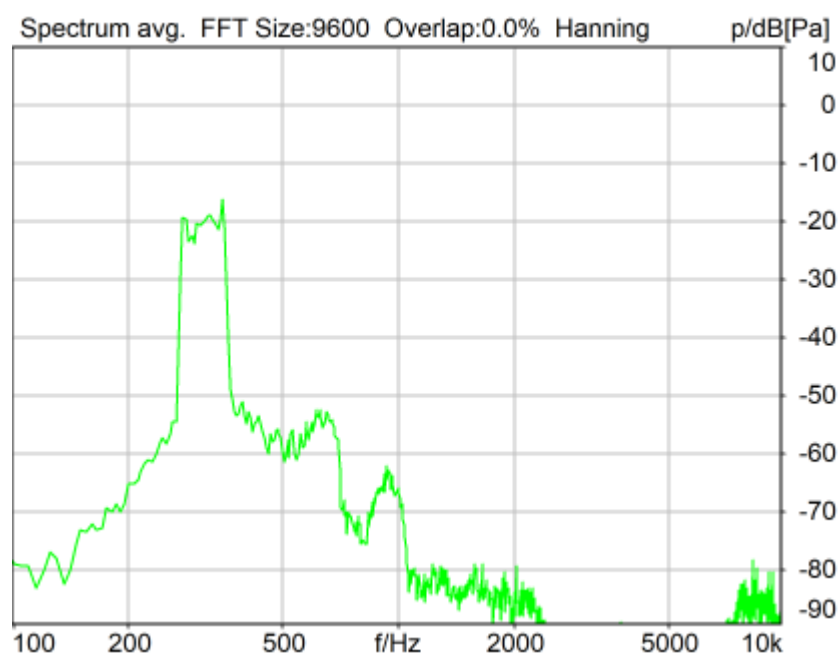
Ok

2024/3/13 23:05 ACQUA 5.1.200

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): 32.21 dB (2.45%) Ok

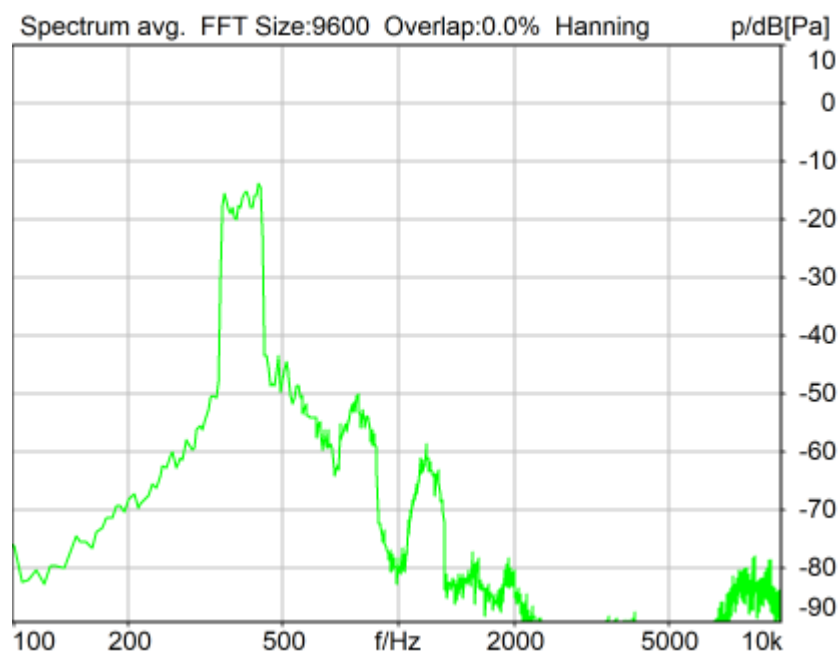
Ok

2024/3/13 23:06 ACQUA 5.1.200

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): 31.12 dB (2.78%) Ok

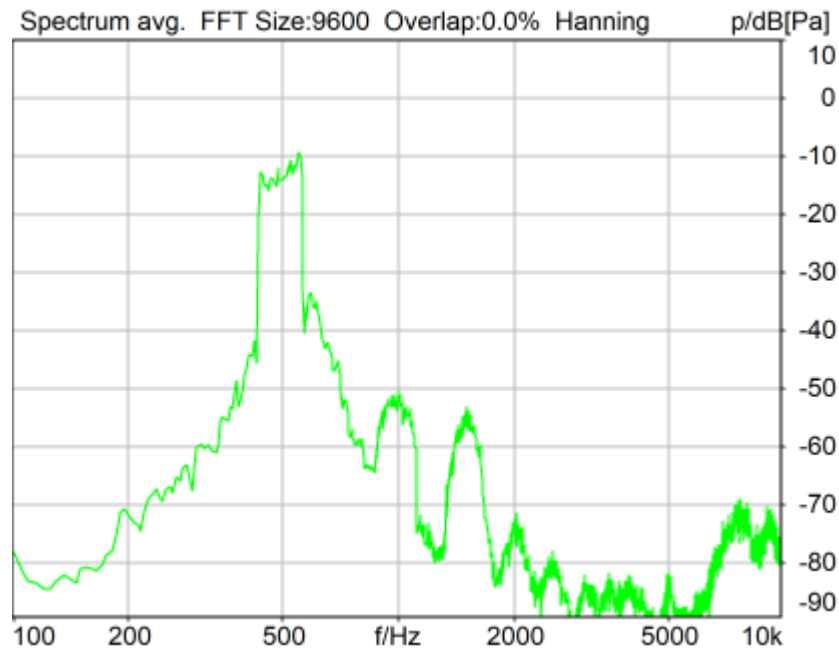
Ok

2024/3/13 23:06 ACQUA 5.1.200

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): 28.85 dB (3.61%) Ok

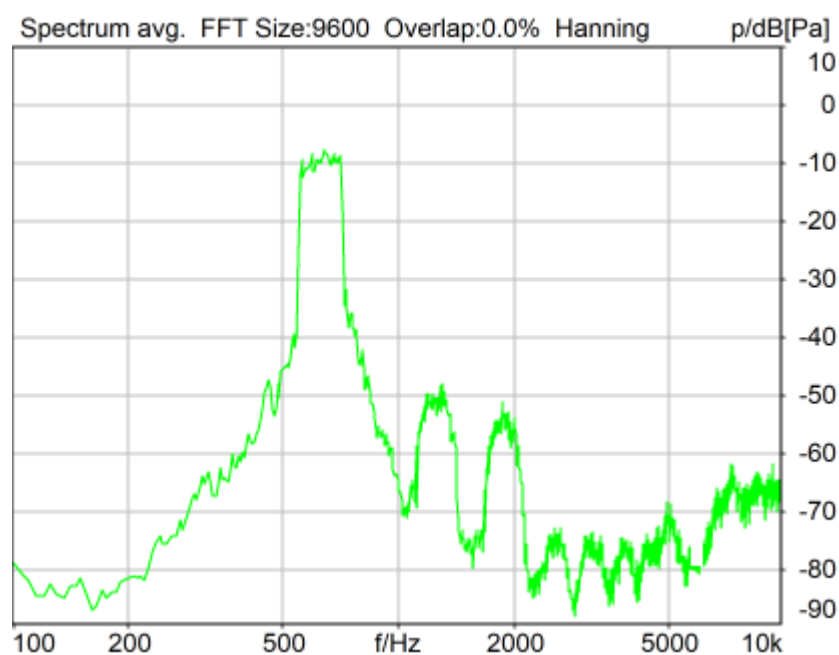
Ok

2024/3/13 23:07 ACQUA 5.1.200

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): 32.13 dB (2.48%) Ok

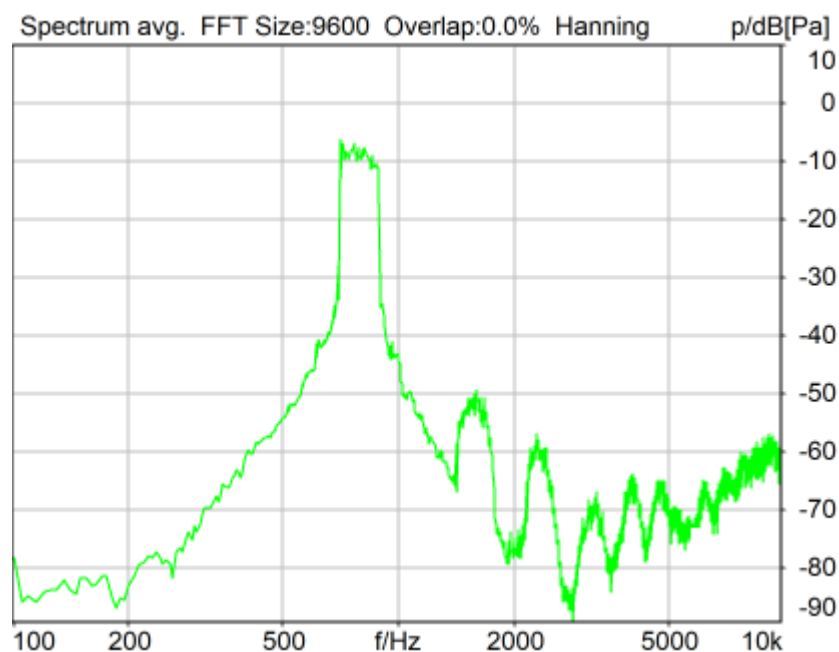
Ok

2024/3/13 23:07 ACQUA 5.1.200

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): 32.32 dB (2.42%) Ok

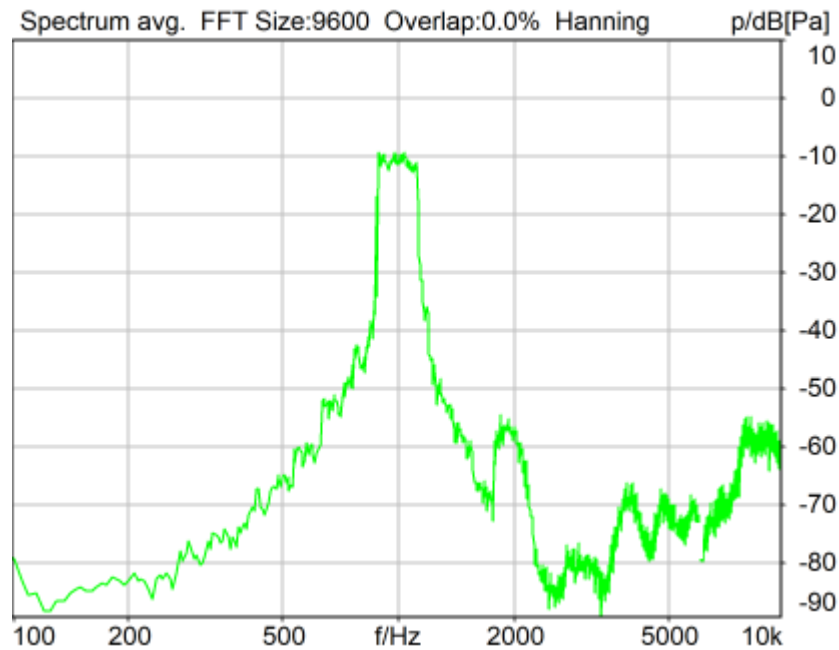
Ok

2024/3/13 23:07 ACQUA 5.1.200

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): 30.27 dB (3.07%) Ok

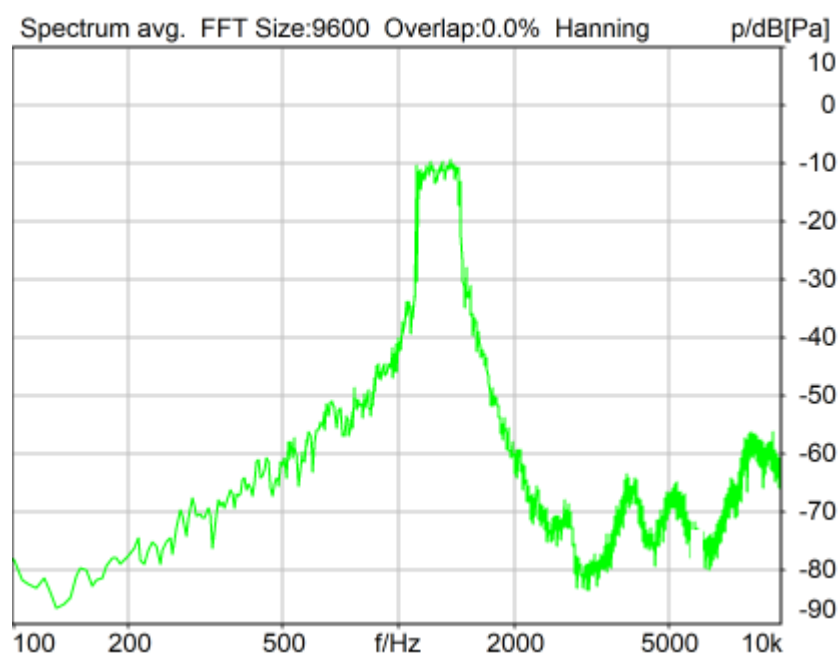
Ok

2024/3/13 23:08 ACQUA 5.1.200

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): 21.83 dB (8.10%) Ok

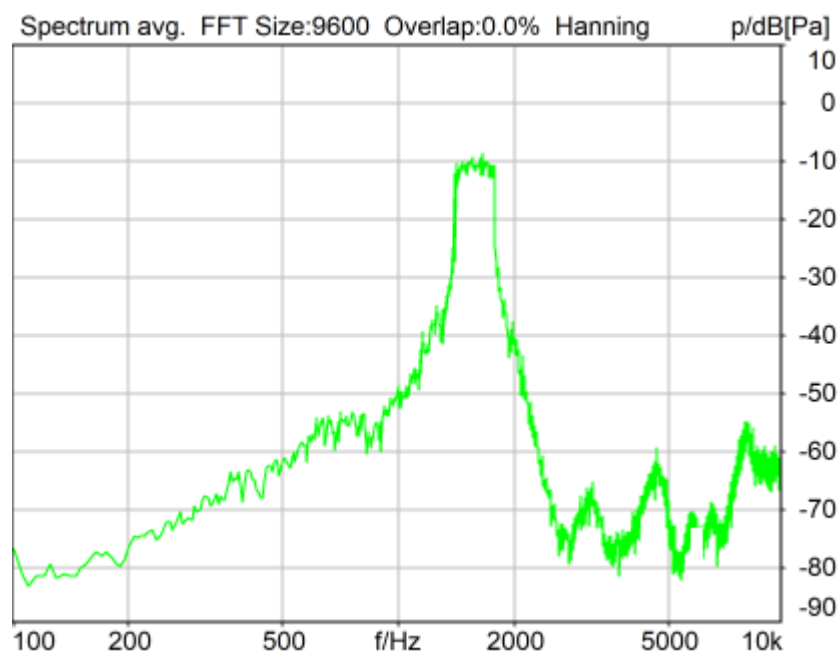
Ok

2024/3/13 23:08 ACQUA 5.1.200

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): 23.80 dB (6.46%) Ok

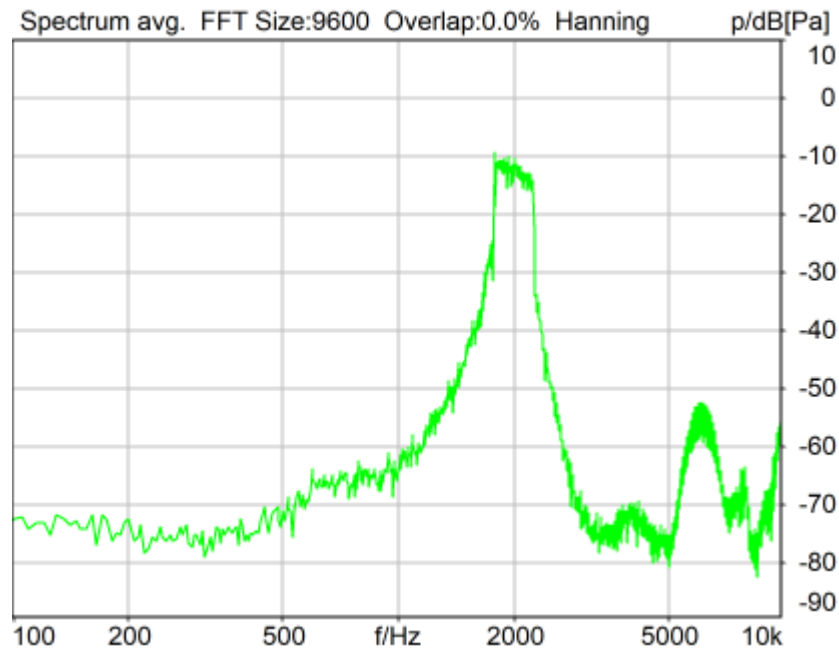
Ok

2024/3/13 23:09 ACQUA 5.1.200

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): 21.39 dB (8.52%) Ok

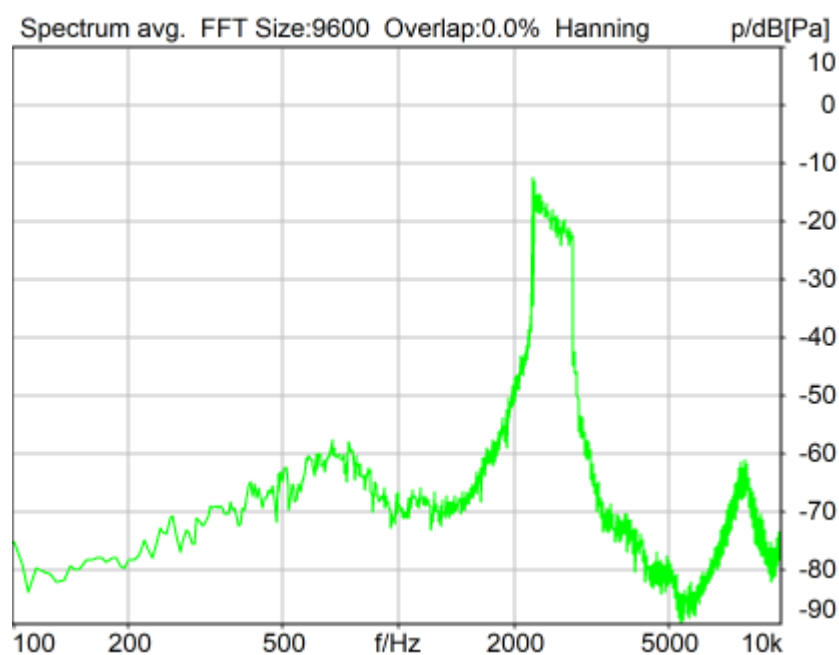
Ok

2024/3/13 23:09 ACQUA 5.1.200

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): 26.54 dB (4.71%) Ok

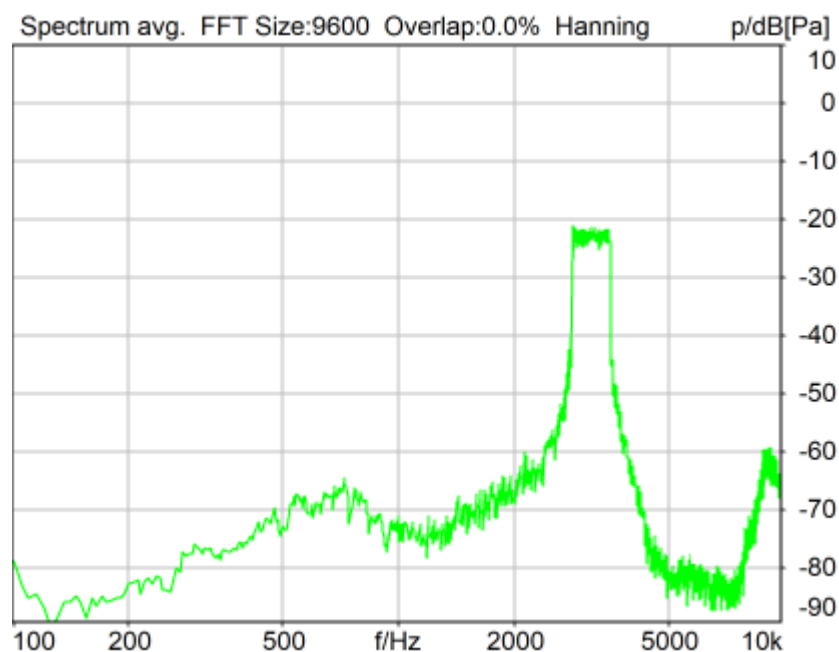
Ok

2024/3/13 23:09 ACQUA 5.1.200

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): 27.98 dB (3.99%) Ok

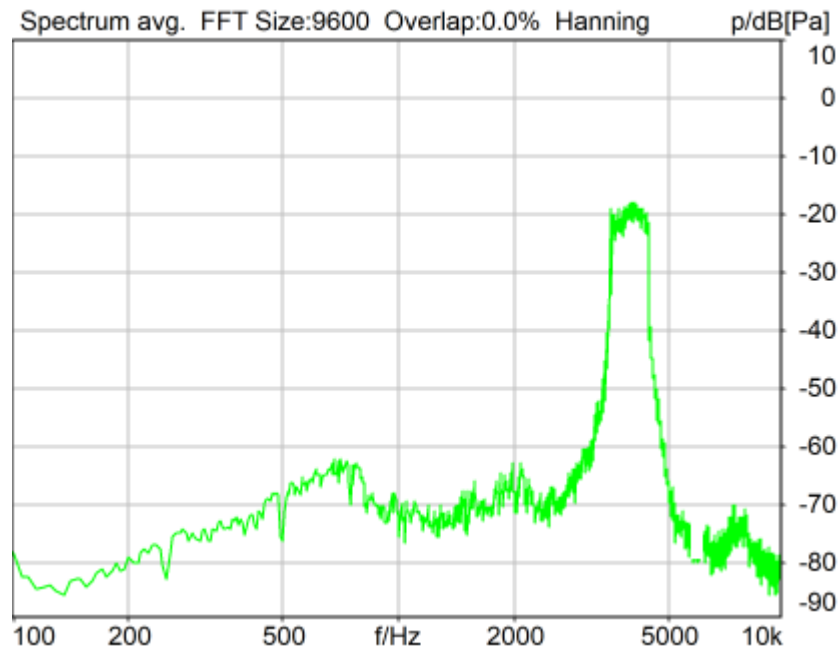
Ok

2024/3/13 23:10 ACQUA 5.1.200

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): 27.56 dB (4.19%) Ok

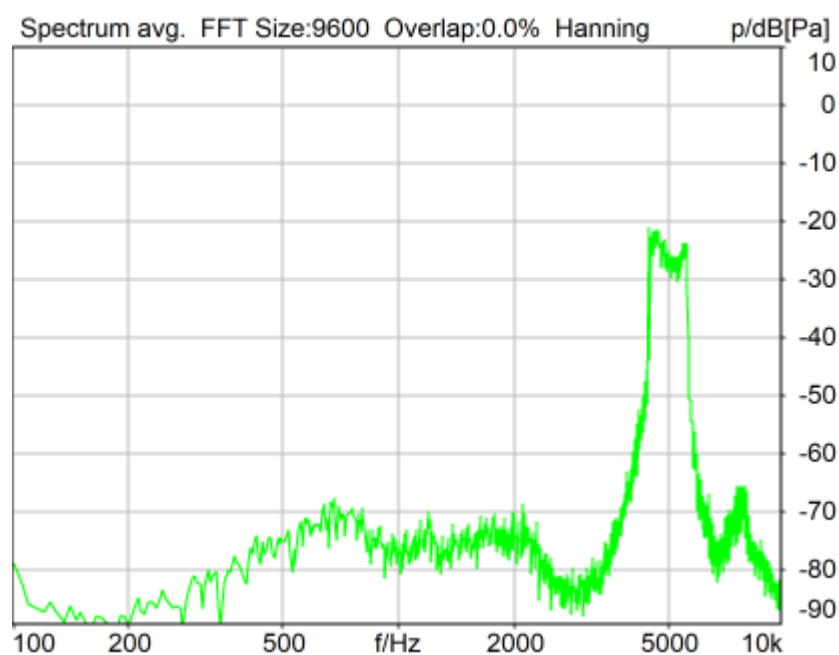
Ok

2024/3/13 23:10 ACQUA 5.1.200

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): 30.07 dB (3.14%) Ok

Ok

2024/3/13 23:11 ACQUA 5.1.200

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	30.41 dB
2	315Hz	32.21 dB
3	400Hz	31.12 dB
4	500Hz	28.85 dB
5	630Hz	32.13 dB
6	800Hz	32.32 dB
7	1000Hz	30.27 dB
8	1250Hz	21.83 dB
9	1600Hz	23.80 dB
10	2000Hz	21.39 dB
11	2500Hz	26.54 dB
12	3150Hz	27.98 dB
13	4000Hz	27.56 dB
14	5000Hz	30.07 dB

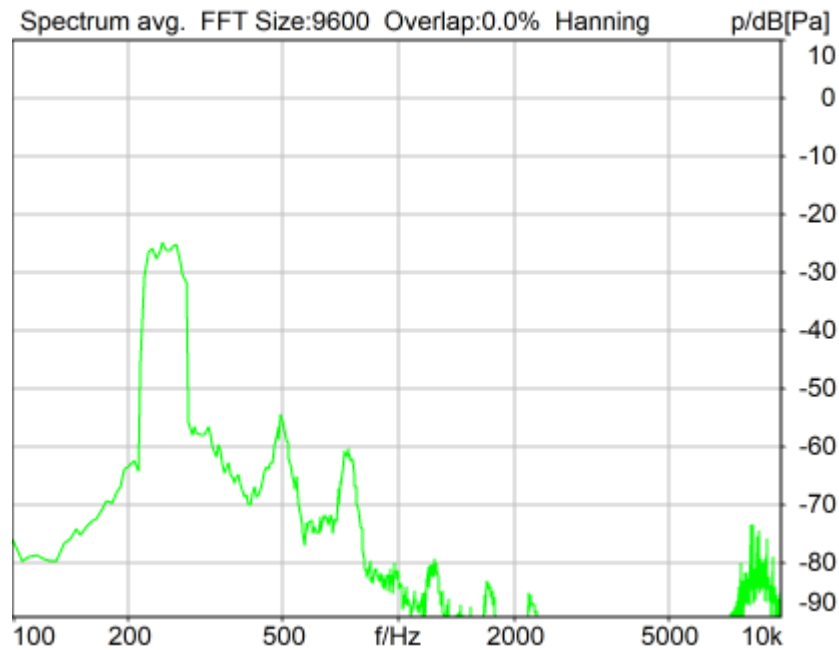
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.39dB at 2000Hz.

2024/3/13 23:11 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): 30.64 dB (2.94%) Ok

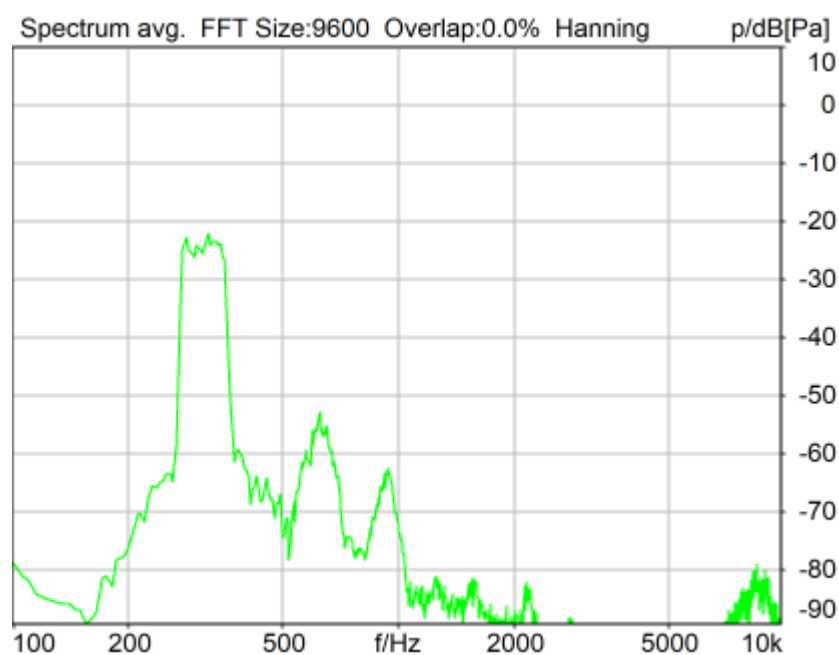
Ok

2024/3/13 22:40 ACQUA 5.1.200

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): 31.74 dB (2.59%) Ok

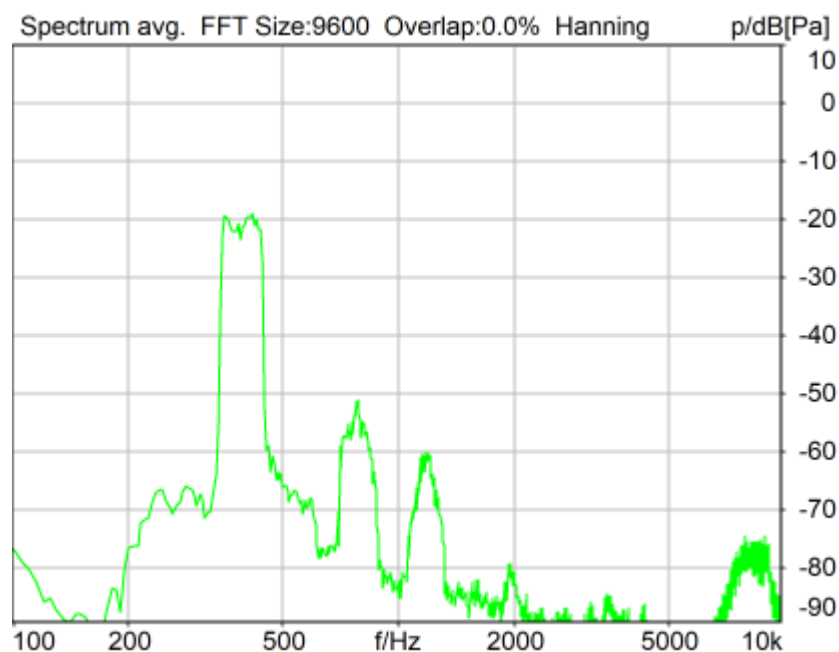
Ok

2024/3/13 22:40 ACQUA 5.1.200

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): 32.40 dB (2.40%) Ok

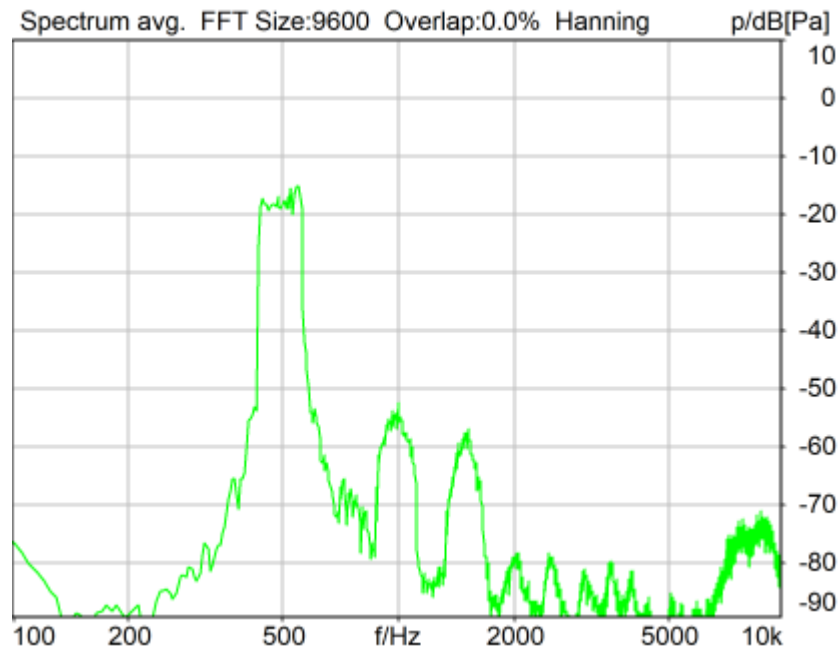
Ok

2024/3/13 22:41 ACQUA 5.1.200

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): 34.28 dB (1.93%) Ok

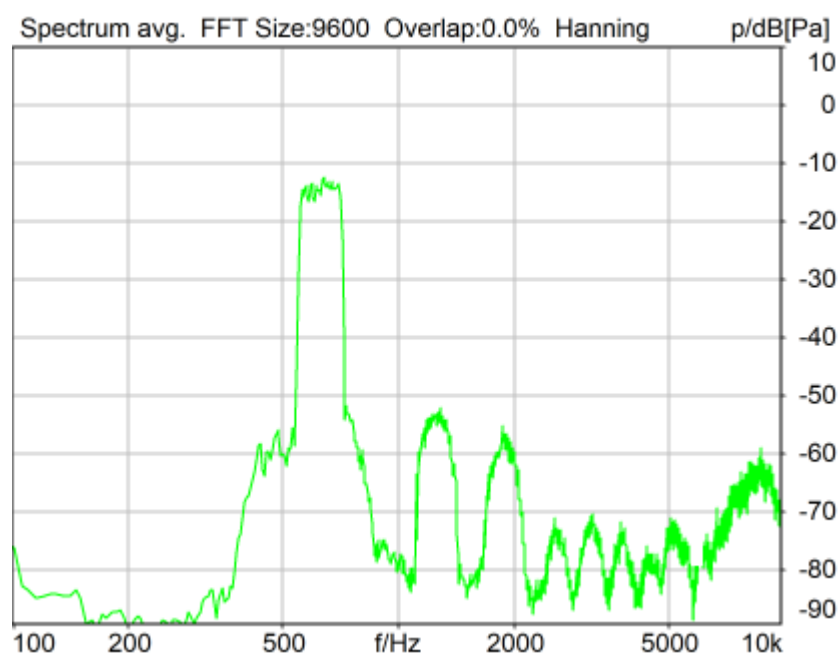
Ok

2024/3/13 22:41 ACQUA 5.1.200

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): 34.28 dB (1.93%) Ok

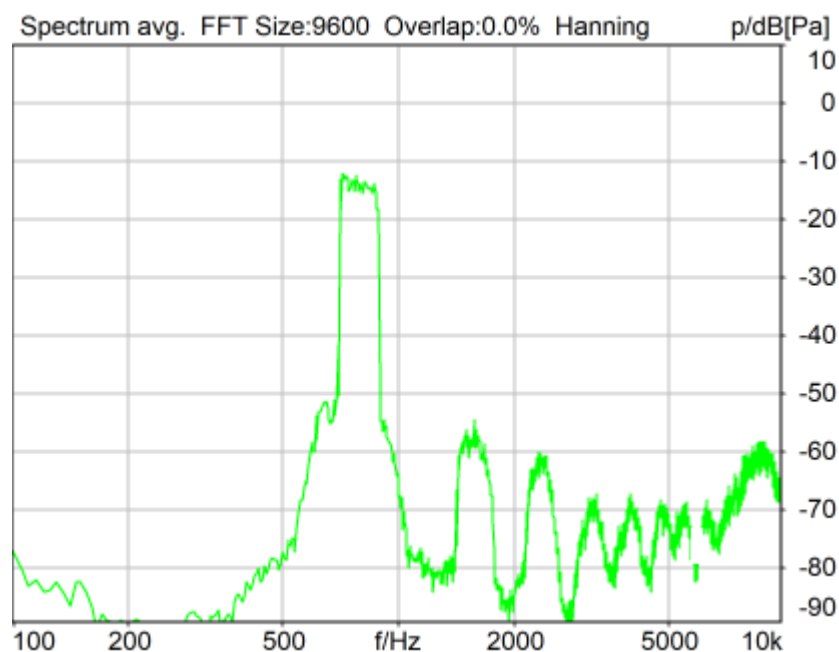
Ok

2024/3/13 22:41 ACQUA 5.1.200

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): 34.99 dB (1.78%) Ok

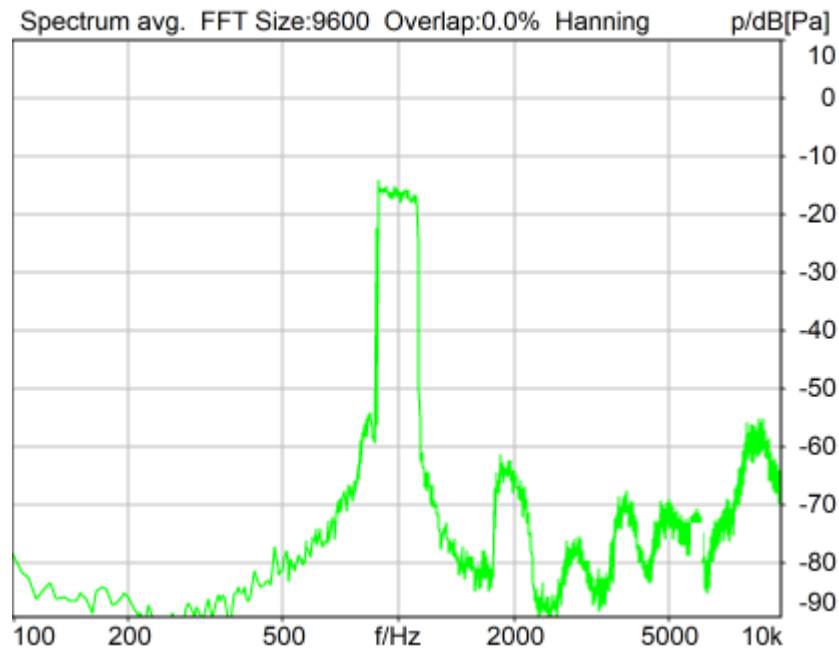
Ok

2024/3/13 22:42 ACQUA 5.1.200

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): 34.75 dB (1.83%) Ok

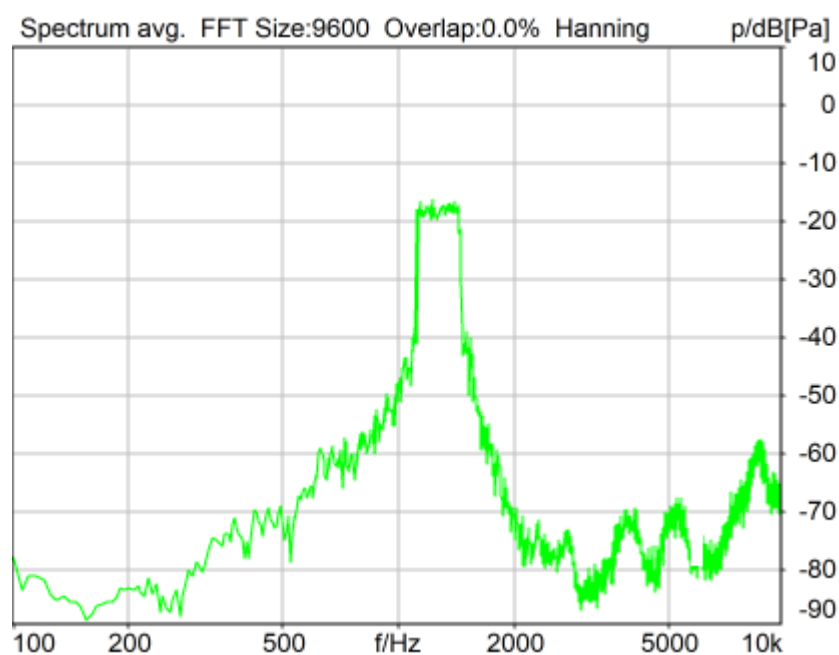
Ok

2024/3/13 22:42 ACQUA 5.1.200

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): 24.56 dB (5.92%) Ok

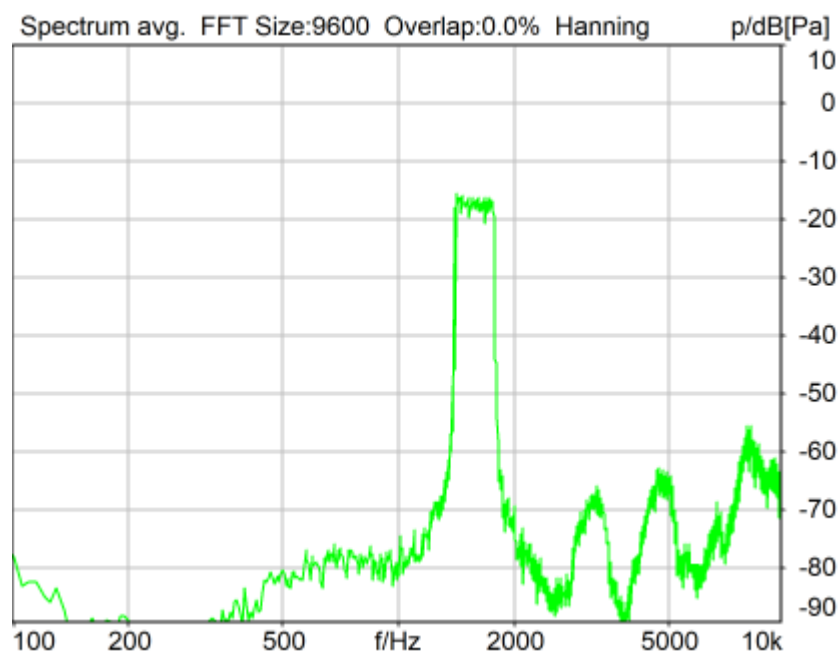
Ok

2024/3/13 22:43 ACQUA 5.1.200

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): 36.24 dB (1.54%) Ok

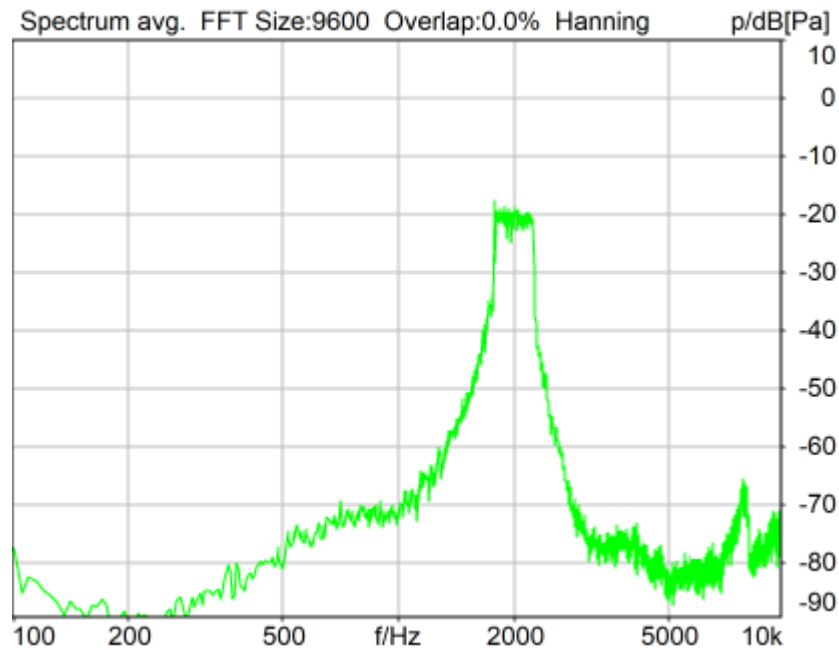
Ok

2024/3/13 22:43 ACQUA 5.1.200

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): 21.41 dB (8.50%) Ok

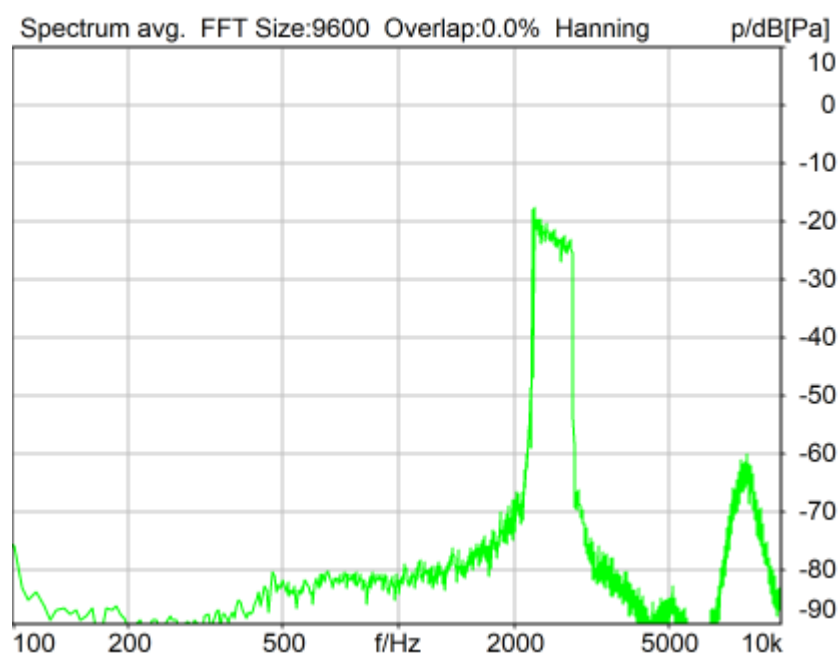
Ok

2024/3/13 23:59 ACQUA 5.1.200

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): 38.14 dB (1.24%) Ok

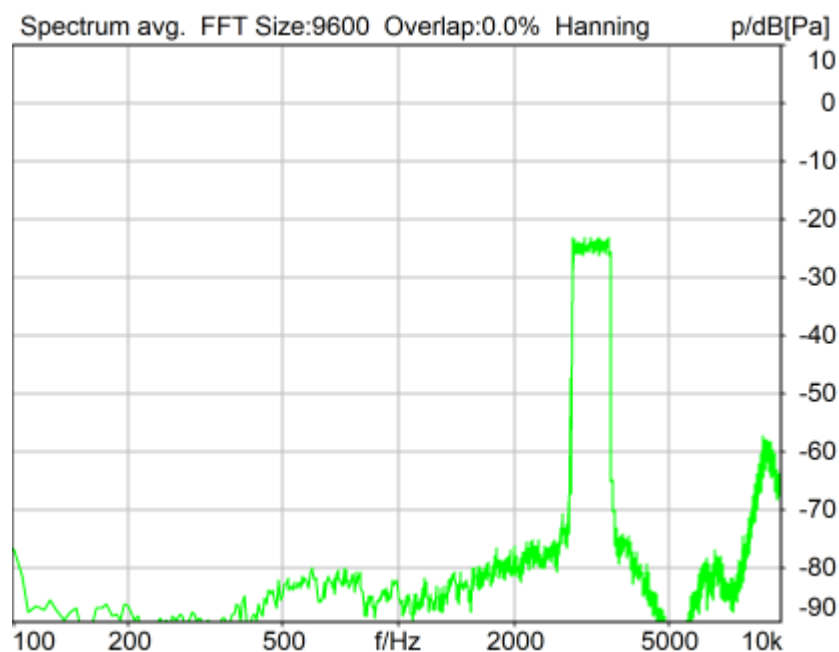
Ok

2024/3/13 22:44 ACQUA 5.1.200

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): 35.83 dB (1.62%) Ok

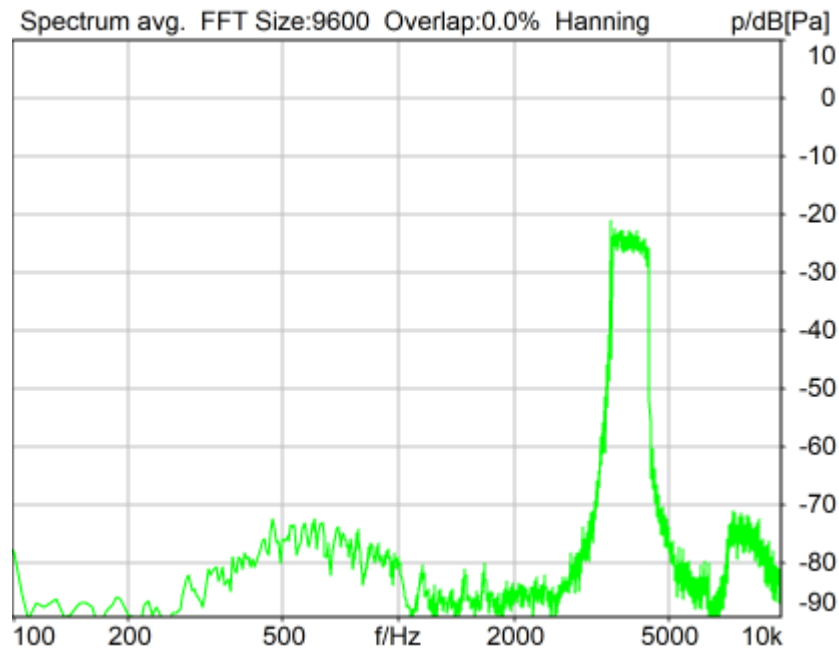
Ok

2024/3/13 22:44 ACQUA 5.1.200

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): 31.35 dB (2.71%) Ok

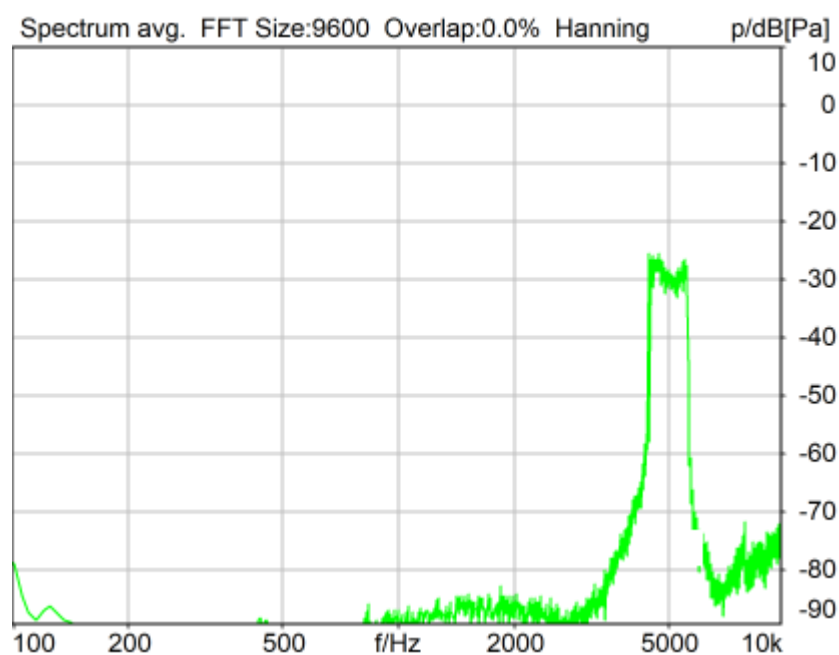
Ok

2024/3/13 22:45 ACQUA 5.1.200

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): 36.41 dB (1.51%) Ok

Ok

2024/3/13 22:45 ACQUA 5.1.200

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	30.41 dB
2	315Hz	32.21 dB
3	400Hz	31.12 dB
4	500Hz	28.85 dB
5	630Hz	32.13 dB
6	800Hz	32.32 dB
7	1000Hz	30.27 dB
8	1250Hz	21.83 dB
9	1600Hz	23.80 dB
10	2500Hz	26.54 dB
11	3150Hz	27.98 dB
12	4000Hz	27.56 dB
13	5000Hz	30.07 dB
14	2000Hz	21.41 dB

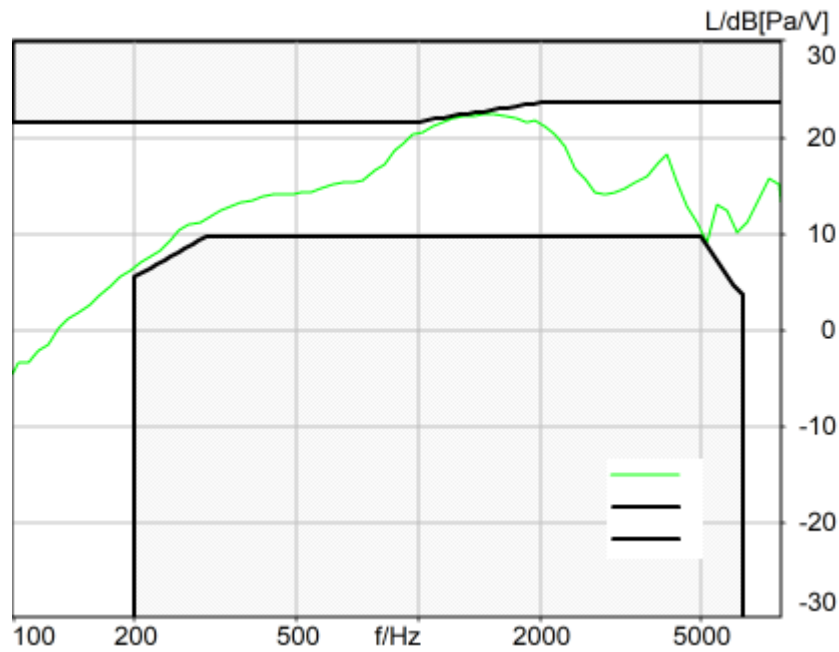
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.41dB at 2000Hz.

2024/3/13 23:59 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



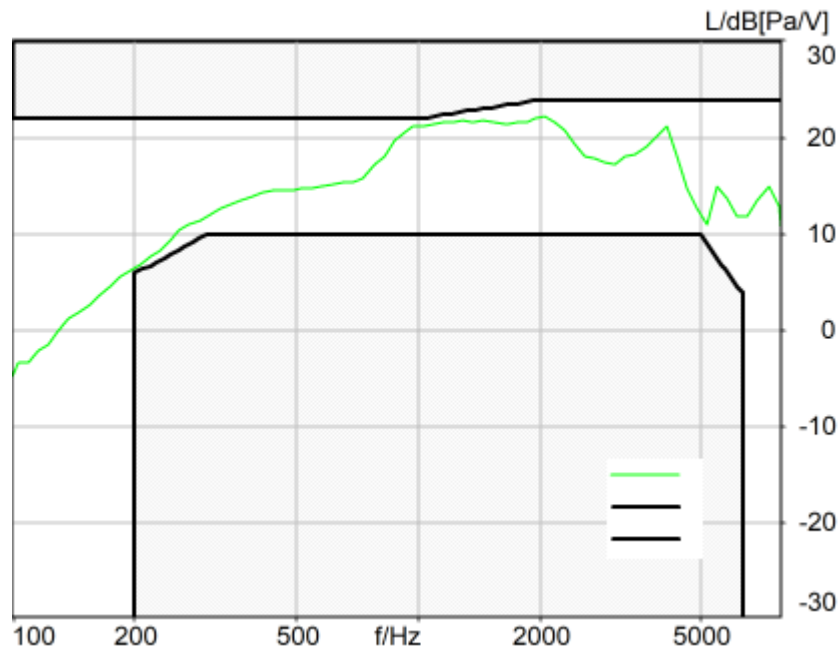
Absolute minimal distance
0.22 dB at 5143.7 Hz Ok

Ok

2024/3/18 9:45 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



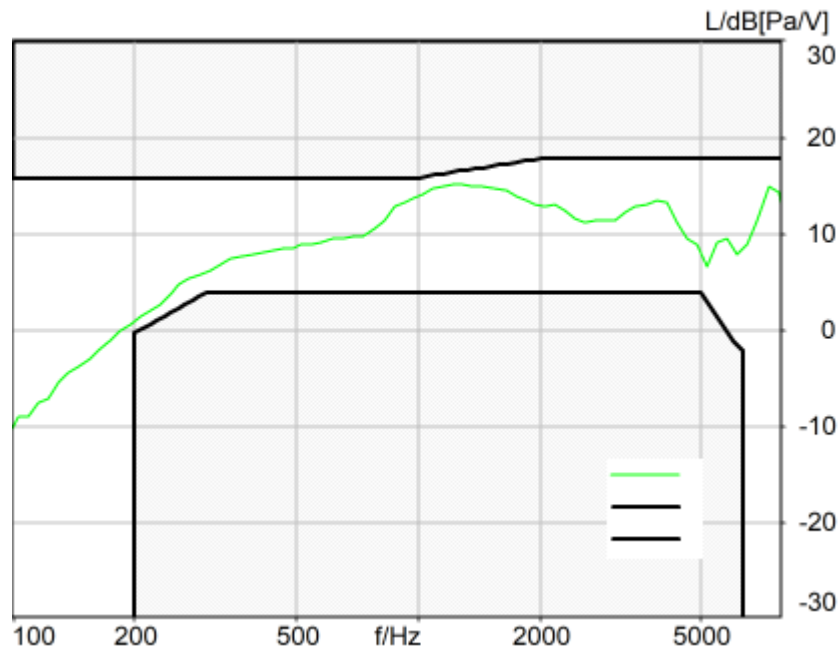
Absolute minimal distance
0.70 dB at 1088.7 Hz Ok

Ok

2024/3/18 9:45 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



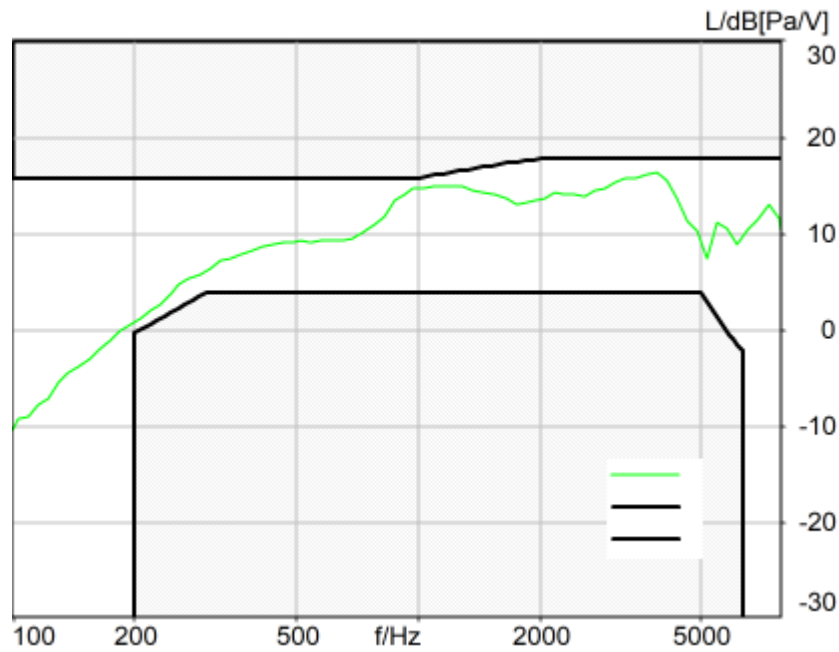
Absolute minimal distance
1.24 dB at 205.7 Hz Ok

Ok

2024/3/18 10:23 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

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



Absolute minimal distance
1.16 dB at 1088.7 Hz Ok

Ok

2024/3/18 10:23 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

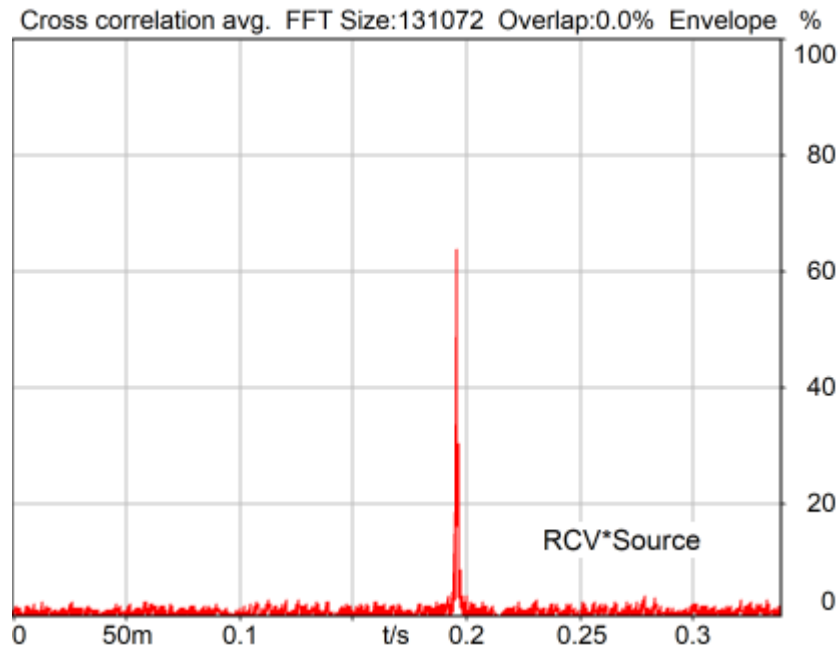
Measurement Object	WIFI 2.4G_802.11b 1Mbps_EVS NB 24.4kbps_CH6
--------------------	---

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:12
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

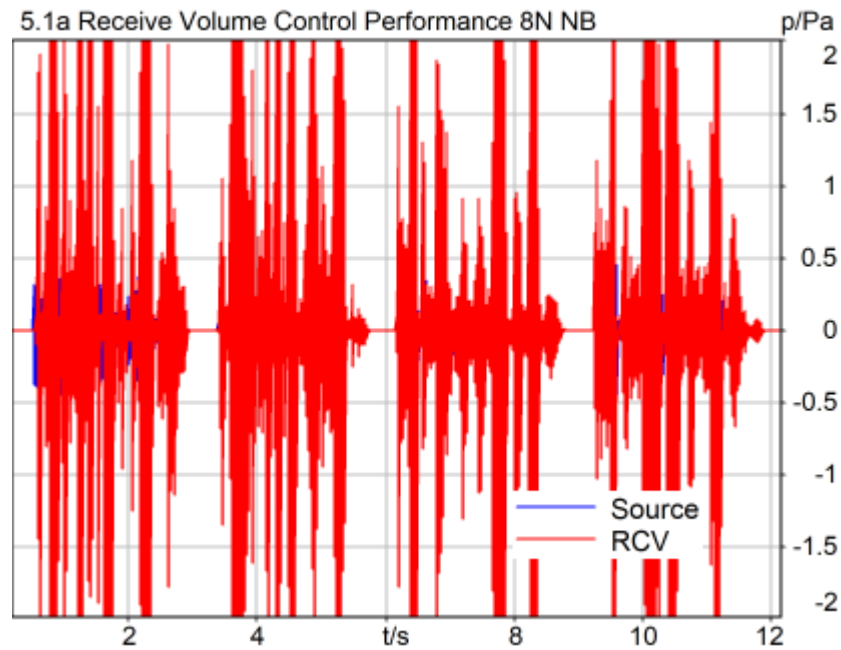


2024/4/2 11:05 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.47 dB[SPL], Act.: 80.14%

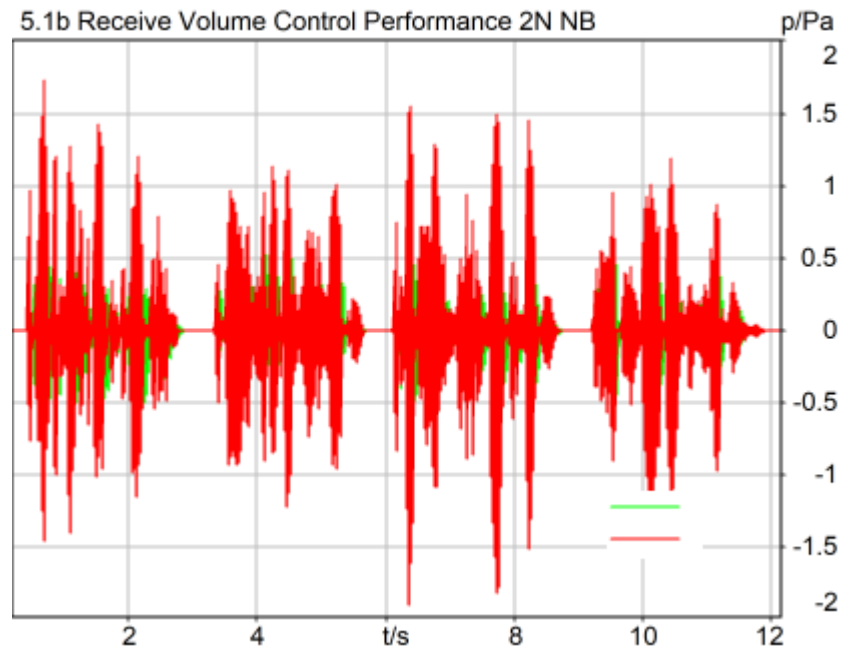
Corrected Speech Level: 17.47 dB[SPL] Ok

Ok

2024/4/2 11:06 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 78.80 dB[SPL], Act.: 83.73%

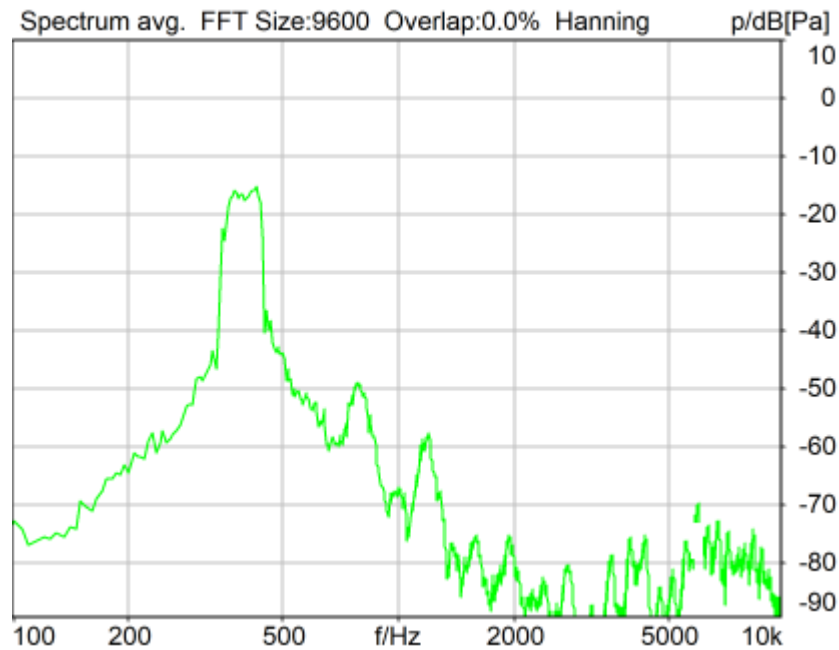
Corrected Speech Level: 8.80 dB[SPL] Ok

Ok

2024/4/2 12:07 ACQUA 5.1.200

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): 29.47 dB (3.36%) Ok

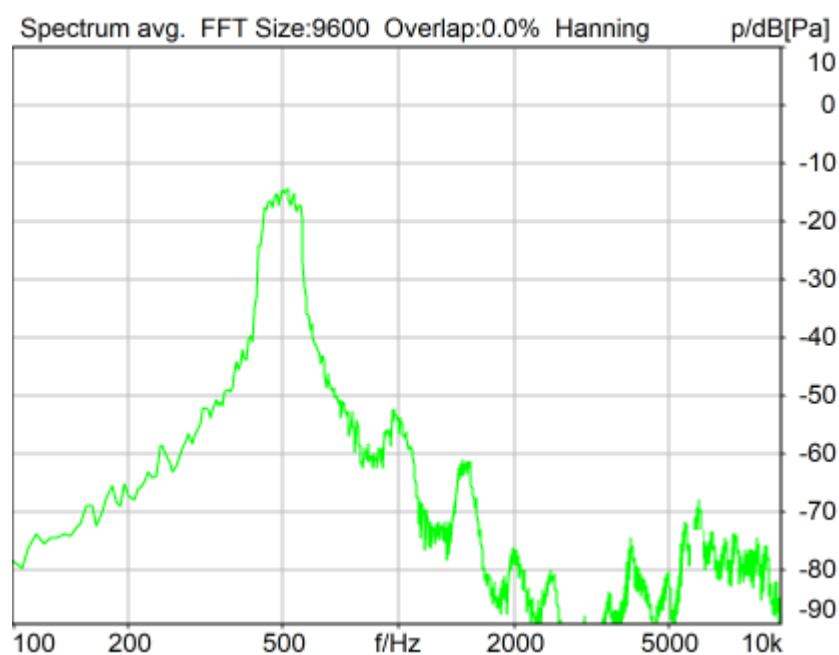
Ok

2024/4/2 11:07 ACQUA 5.1.200

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): 28.66 dB (3.69%) Ok

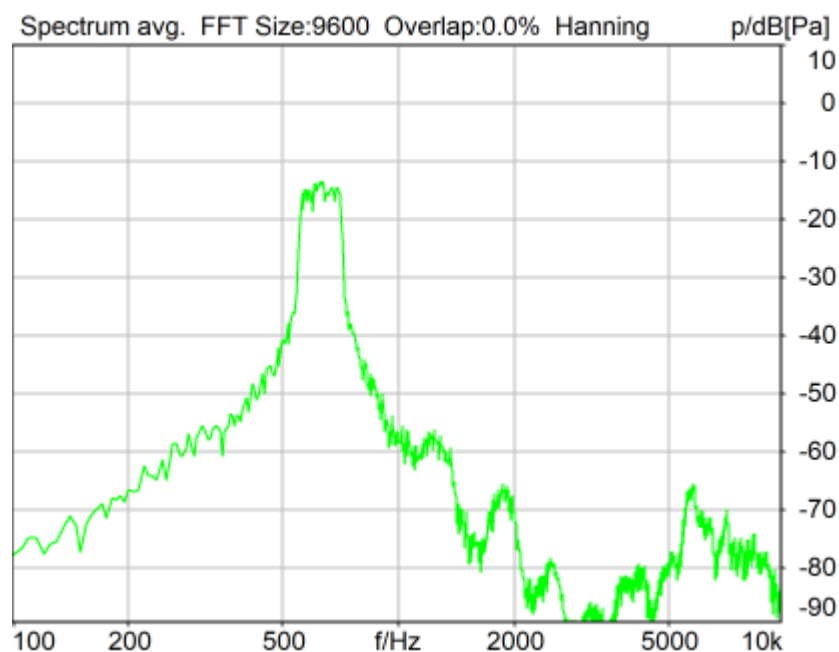
Ok

2024/4/2 11:08 ACQUA 5.1.200

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): 27.95 dB (4.00%) Ok

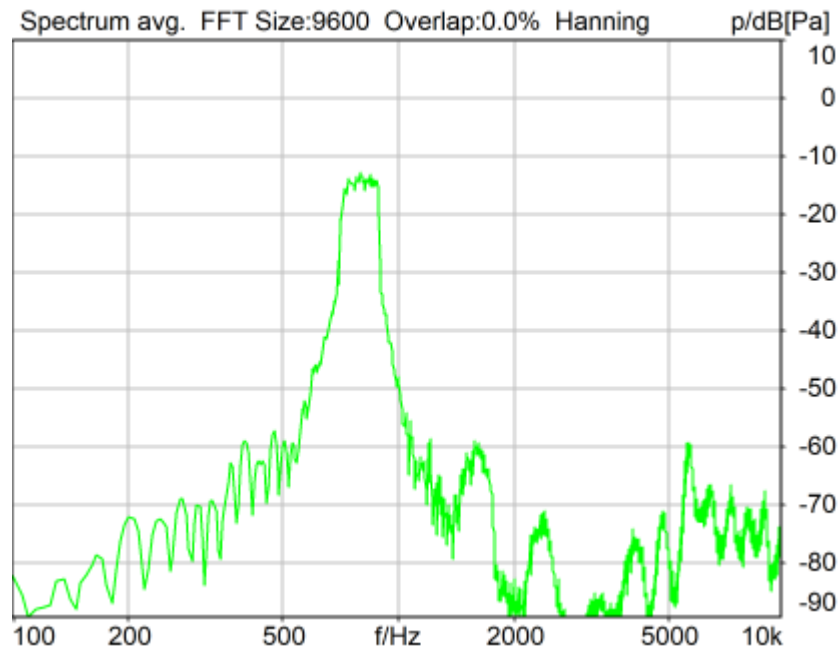
Ok

2024/4/2 11:08 ACQUA 5.1.200

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): 29.30 dB (3.43%) Ok

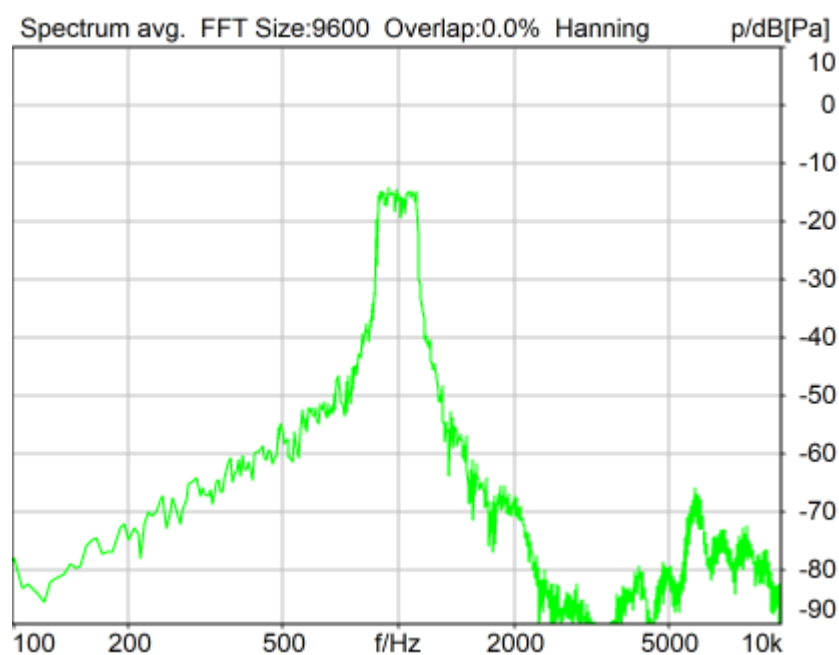
Ok

2024/4/2 11:08 ACQUA 5.1.200

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): 25.88 dB (5.08%) Ok

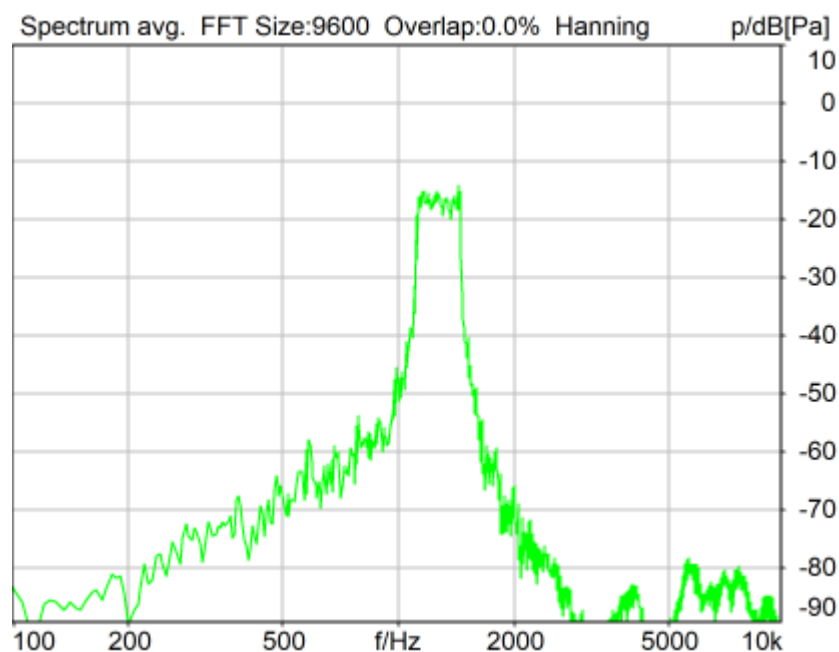
Ok

2024/4/2 11:09 ACQUA 5.1.200

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): 23.65 dB (6.57%) Ok

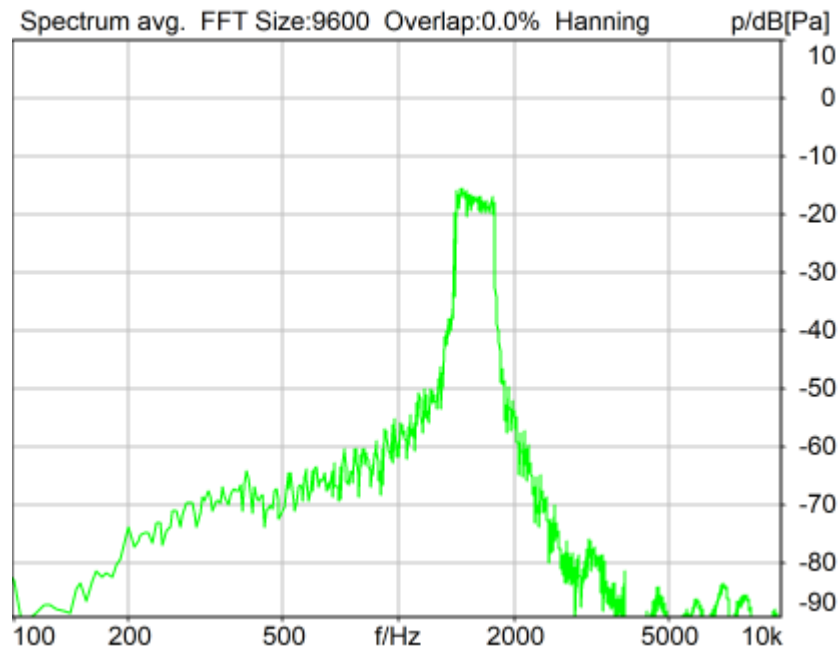
Ok

2024/4/2 11:09 ACQUA 5.1.200

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): 27.37 dB (4.28%) Ok

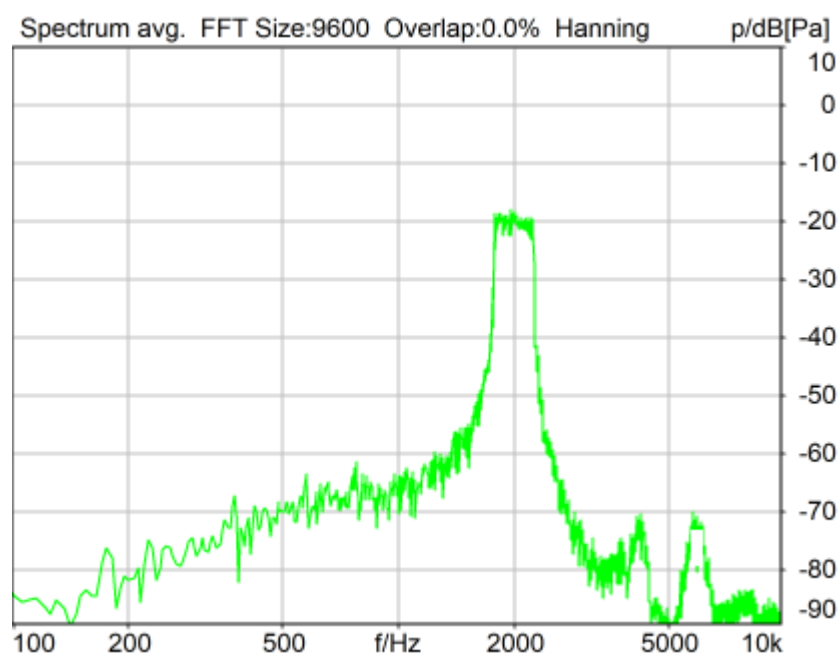
Ok

2024/4/2 11:10 ACQUA 5.1.200

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): 27.55 dB (4.19%) Ok

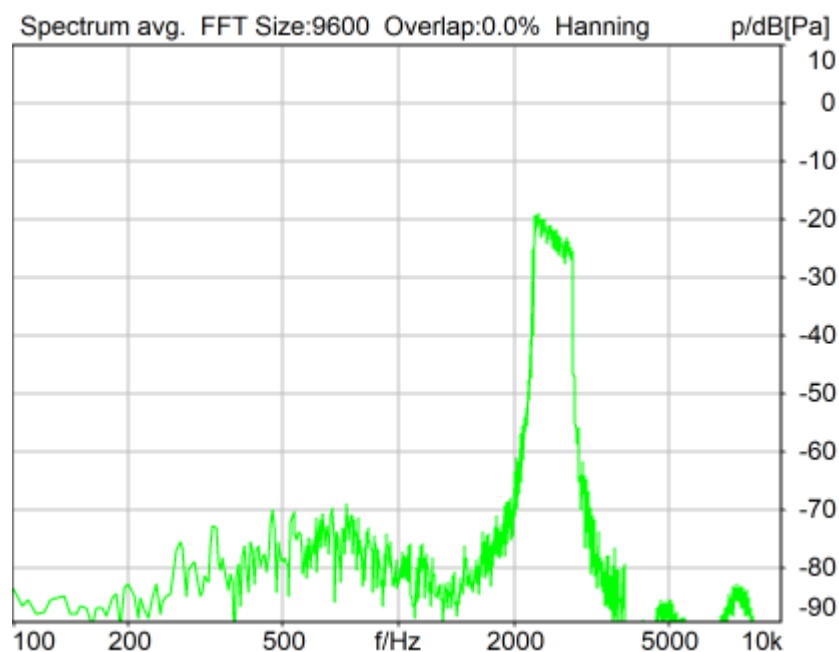
Ok

2024/4/2 11:10 ACQUA 5.1.200

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): 33.20 dB (2.19%) Ok

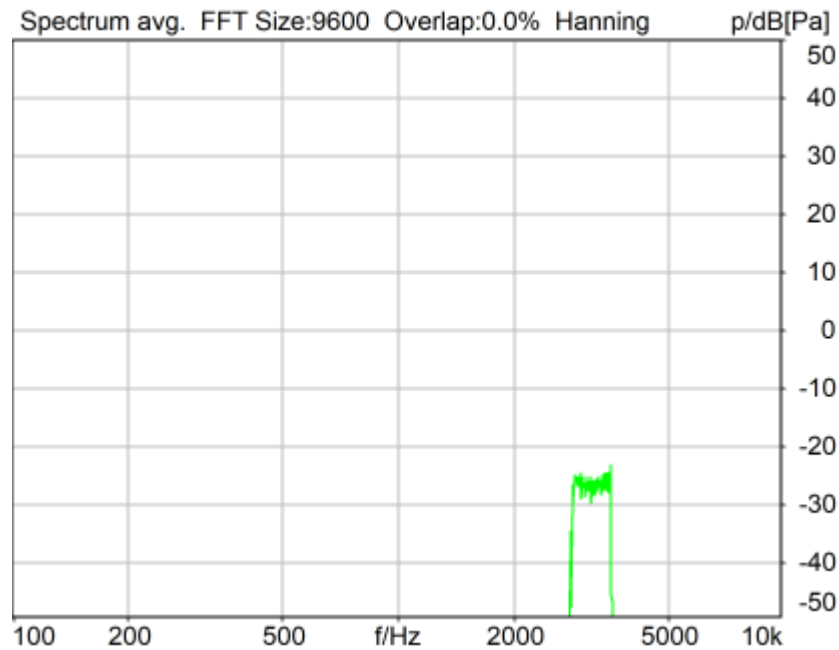
Ok

2024/4/2 11:10 ACQUA 5.1.200

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): 33.93 dB (2.01%) Ok

Ok

2024/4/2 11:11 ACQUA 5.1.200

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

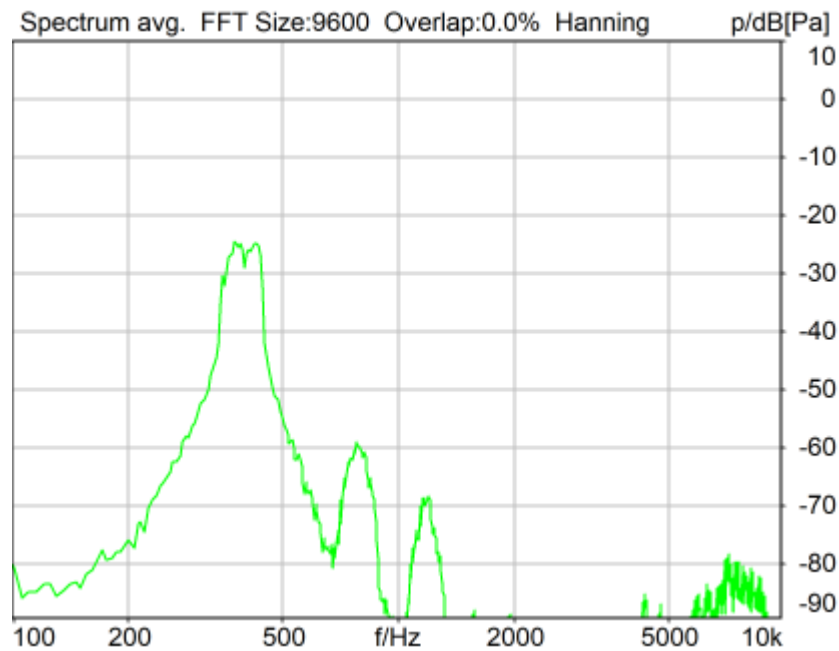
Region	Frequency	SDNR
1	400Hz	29.47 dB
2	500Hz	28.66 dB
3	630Hz	27.95 dB
4	800Hz	29.30 dB
5	1000Hz	25.88 dB
6	1250Hz	23.65 dB
7	1600Hz	27.37 dB
8	2000Hz	27.55 dB
9	2500Hz	33.20 dB
10	3150Hz	33.93 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.65dB at 1250Hz.

2024/4/2 11:11 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): 30.49 dB (2.99%) Ok

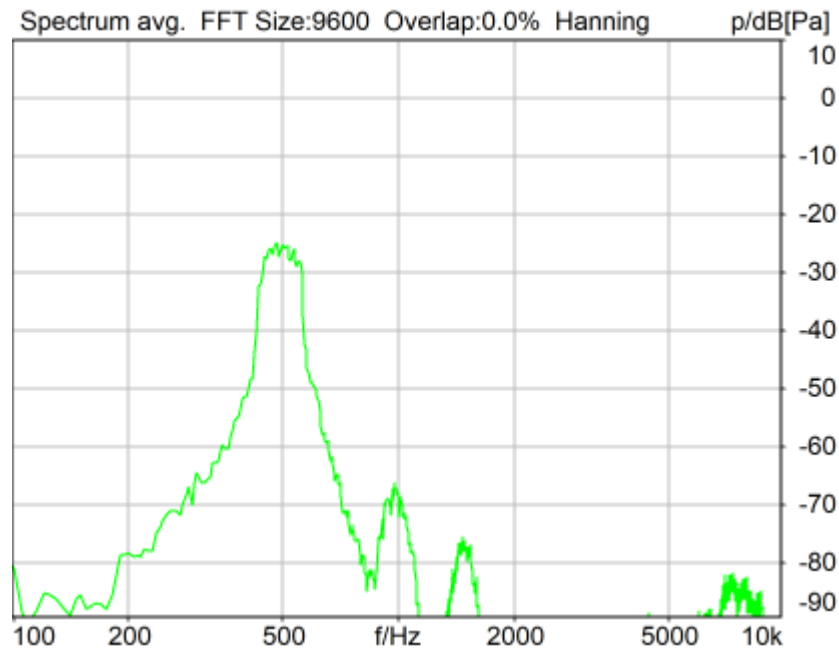
Ok

2024/4/2 12:08 ACQUA 5.1.200

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): 29.60 dB (3.31%) Ok

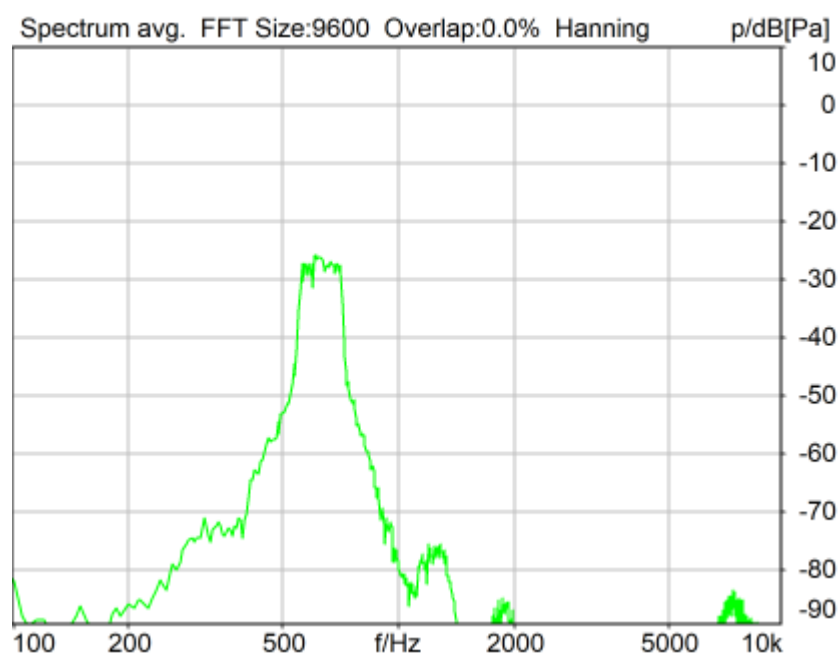
Ok

2024/4/2 12:08 ACQUA 5.1.200

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): 28.29 dB (3.85%) Ok

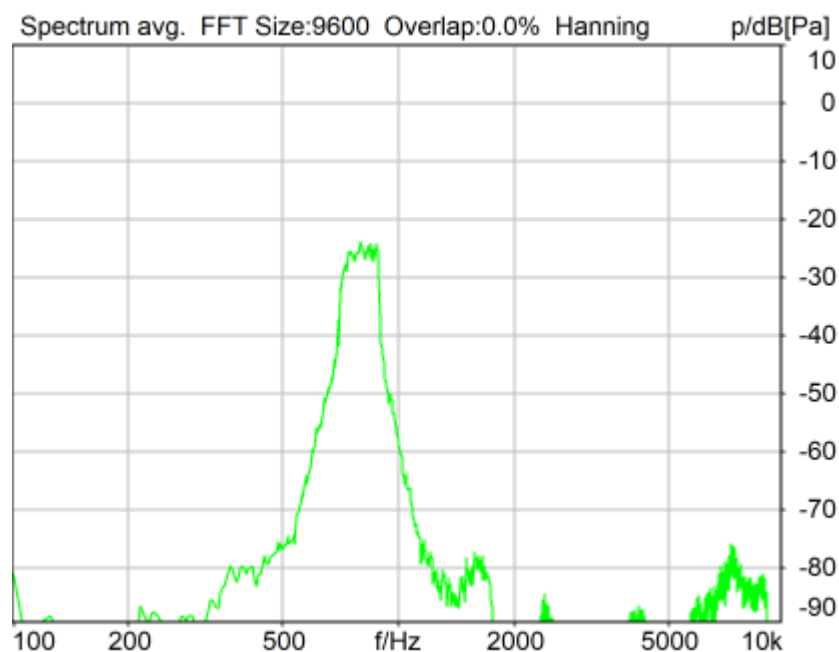
Ok

2024/4/2 12:08 ACQUA 5.1.200

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): 27.73 dB (4.11%) Ok

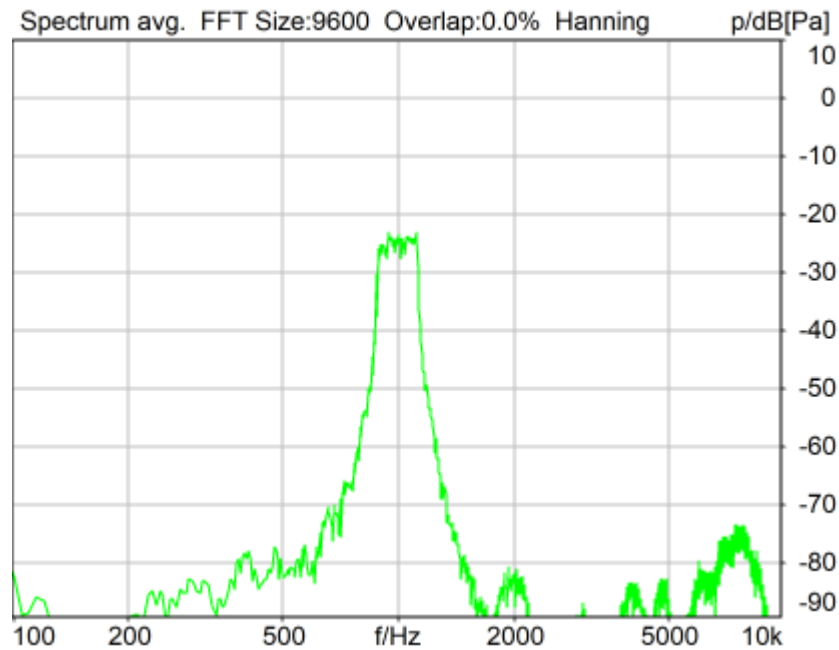
Ok

2024/4/2 12:09 ACQUA 5.1.200

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): 29.11 dB (3.50%) Ok

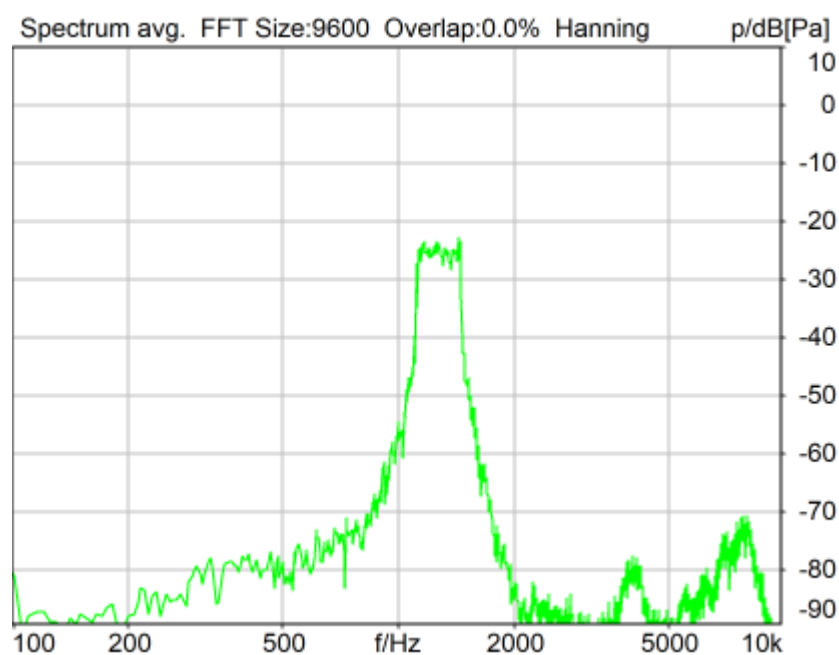
Ok

2024/4/2 12:09 ACQUA 5.1.200

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): 21.63 dB (8.29%) Ok

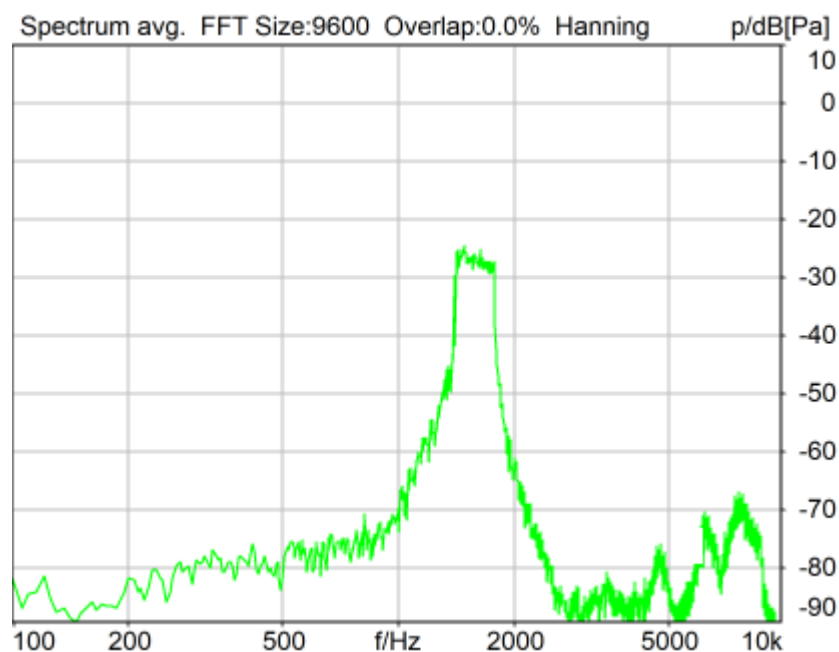
Ok

2024/4/2 12:10 ACQUA 5.1.200

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): 24.16 dB (6.20%) Ok

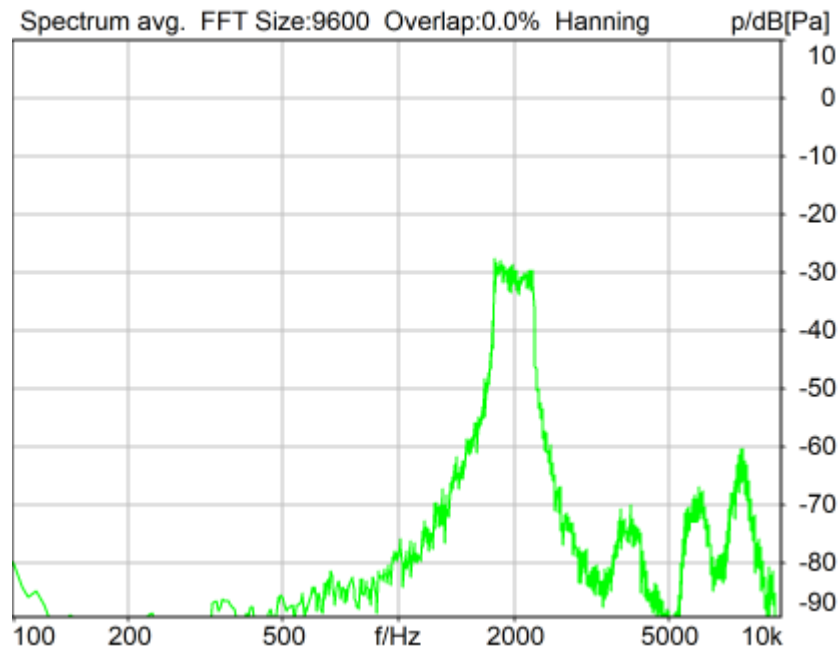
Ok

2024/4/2 12:10 ACQUA 5.1.200

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): 21.41 dB (8.51%) Ok

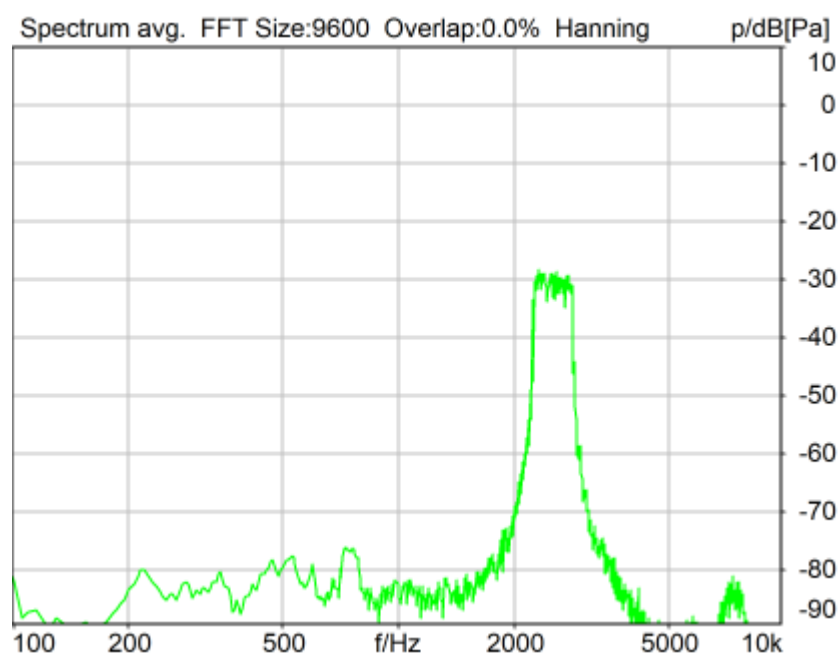
Ok

2024/4/2 12:10 ACQUA 5.1.200

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): 27.79 dB (4.08%) Ok

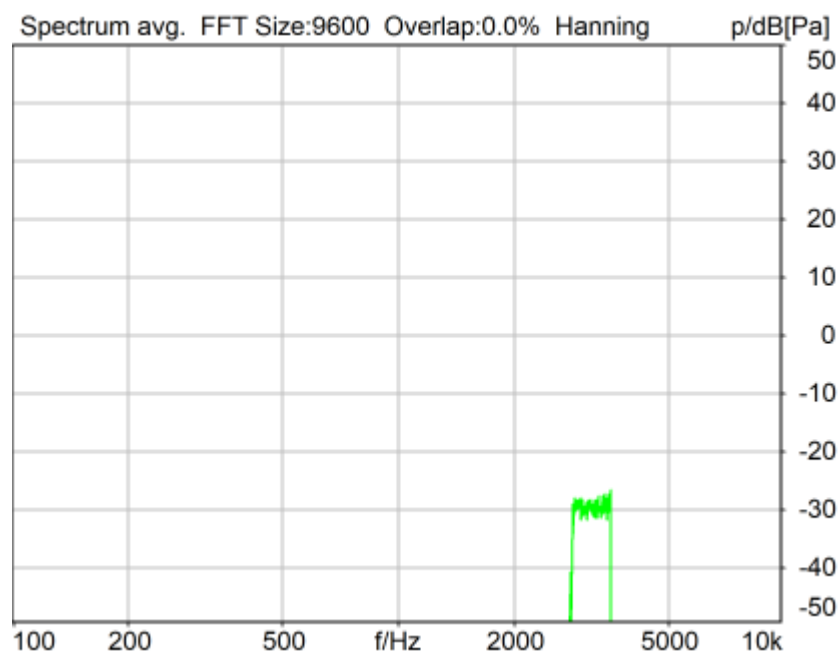
Ok

2024/4/2 12:11 ACQUA 5.1.200

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): 33.17 dB (2.20%) Ok

Ok

2024/4/2 12:11 ACQUA 5.1.200

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	30.49 dB

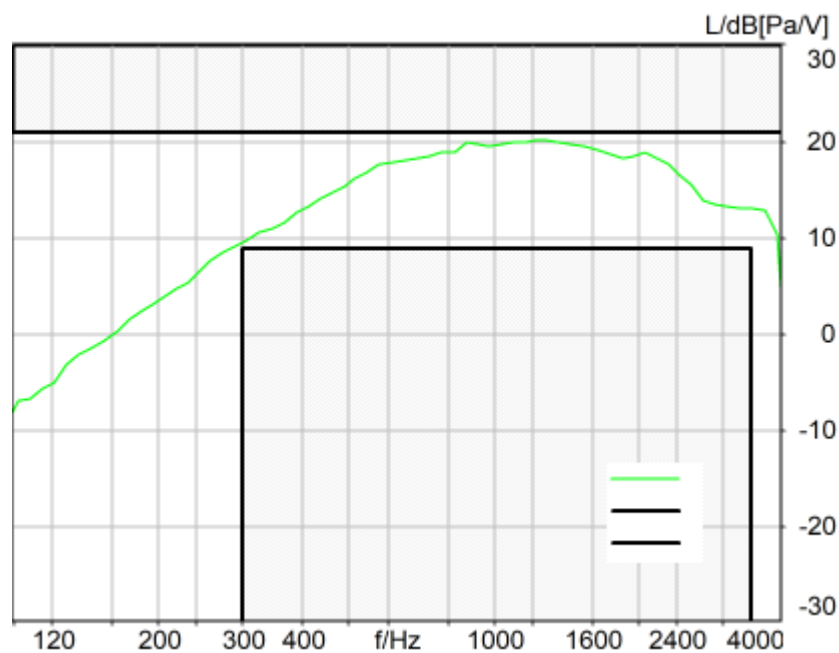
2	500Hz	29.60 dB
3	630Hz	28.29 dB
4	800Hz	27.73 dB
5	1000Hz	29.11 dB
6	1250Hz	21.63 dB
7	1600Hz	24.16 dB
8	2000Hz	21.41 dB
9	2500Hz	27.79 dB
10	3150Hz	33.17 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.41dB at 2000Hz.

2024/4/2 12:11 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



Absolute minimal distance
0.83 dB at 1285.9 Hz Ok

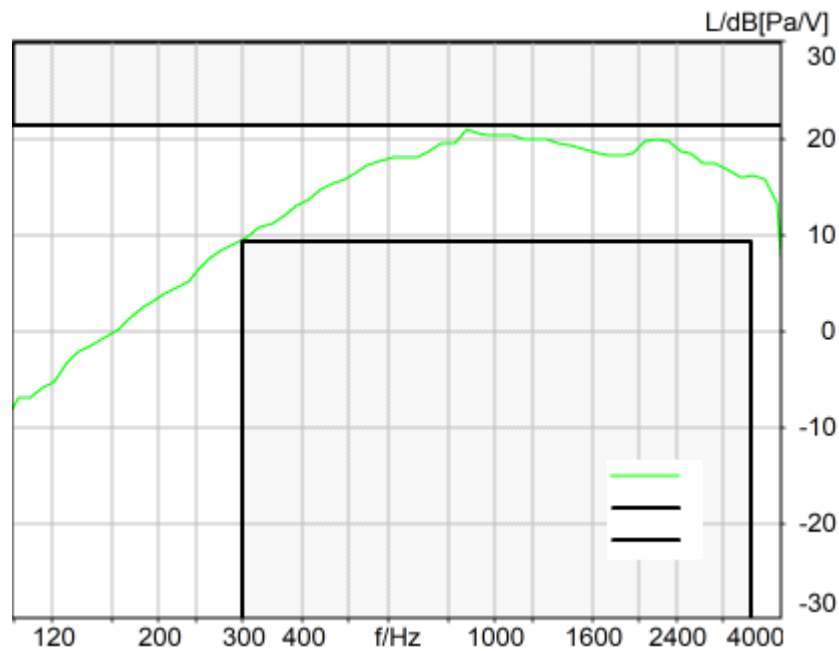
Ok

2024/4/2 11:06 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



Absolute minimal distance

0.43 dB at 873.9 Hz Ok

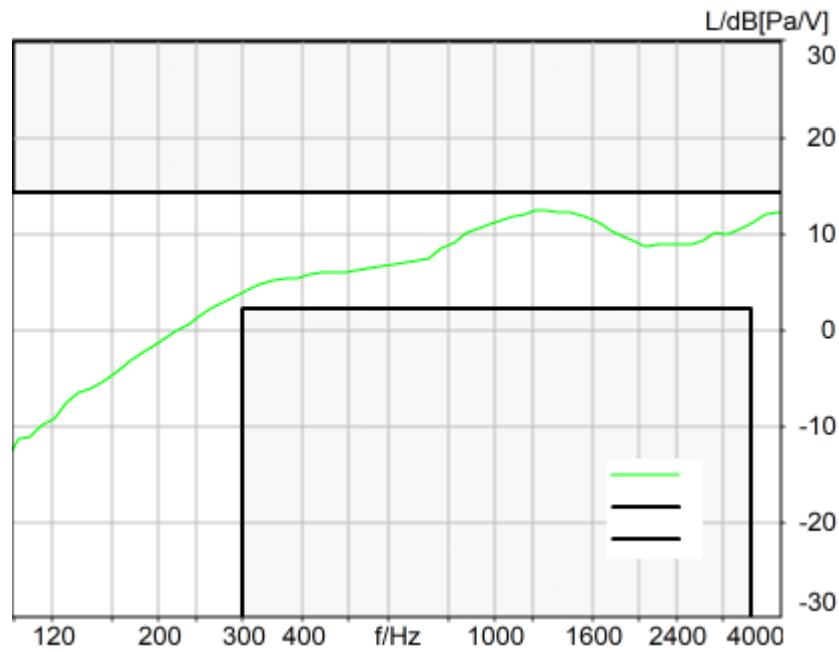
Ok

2024/4/2 11:07 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



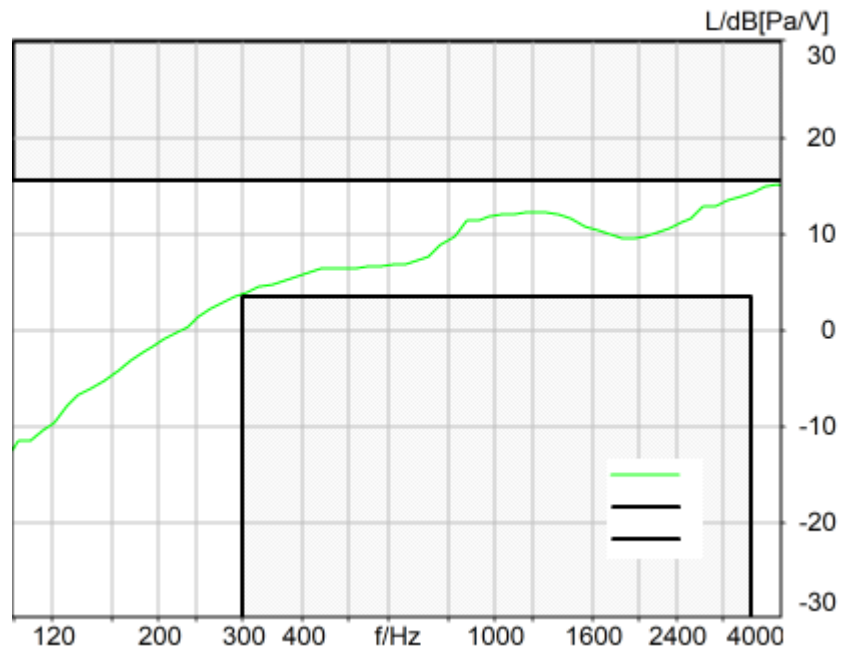
Absolute minimal distance
1.84 dB at 305.9 Hz Ok

Ok

2024/4/2 12:12 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.42 dB at 305.9 Hz Ok

Ok

2024/4/2 12:12 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

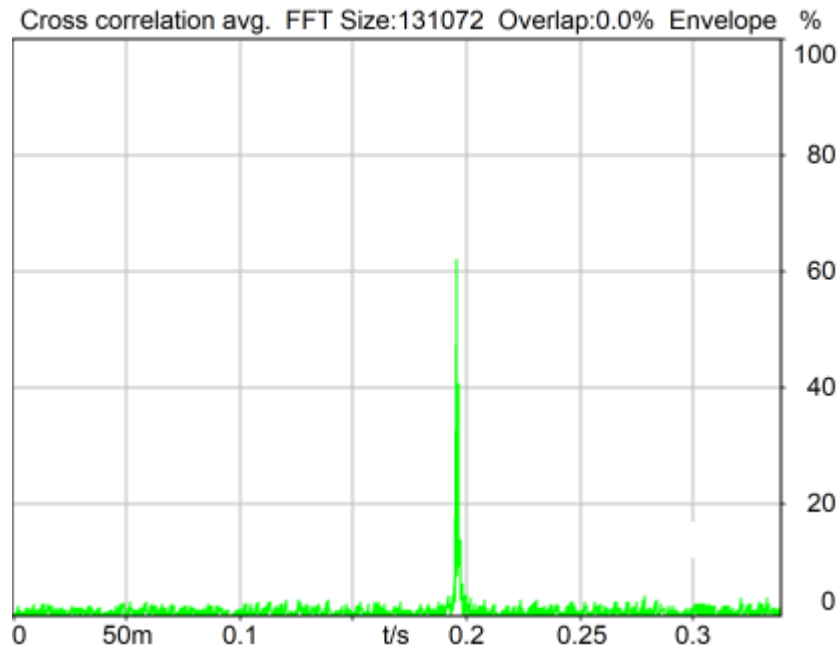
Measurement Object	WIFI 2.4G_802.11b 1Mbps_EVS WB 128kbps_CH6
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/27 12:07
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



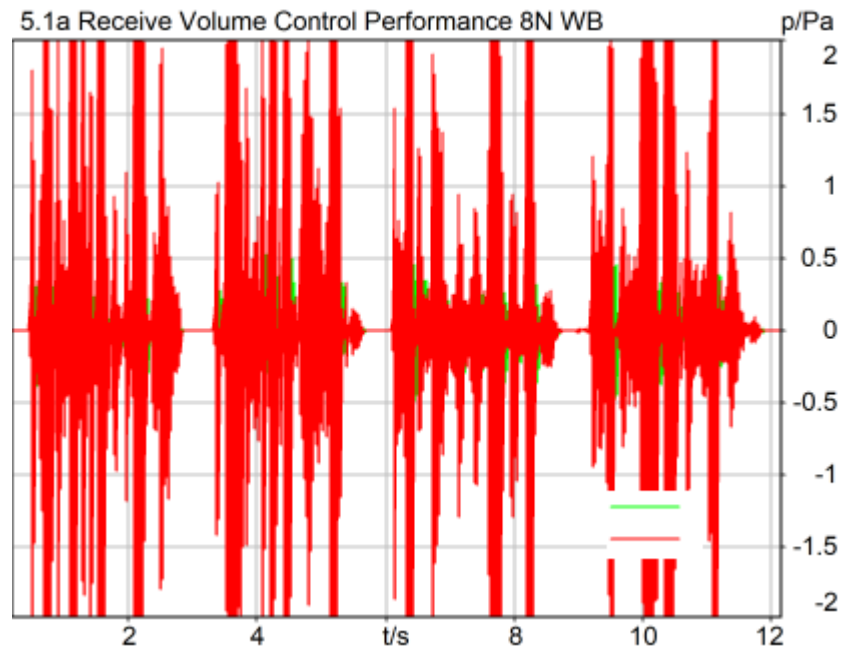
Delay (Cross): 196.1 ms

2024/4/2 11:12 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.68 dB[SPL], Act.: 80.18%

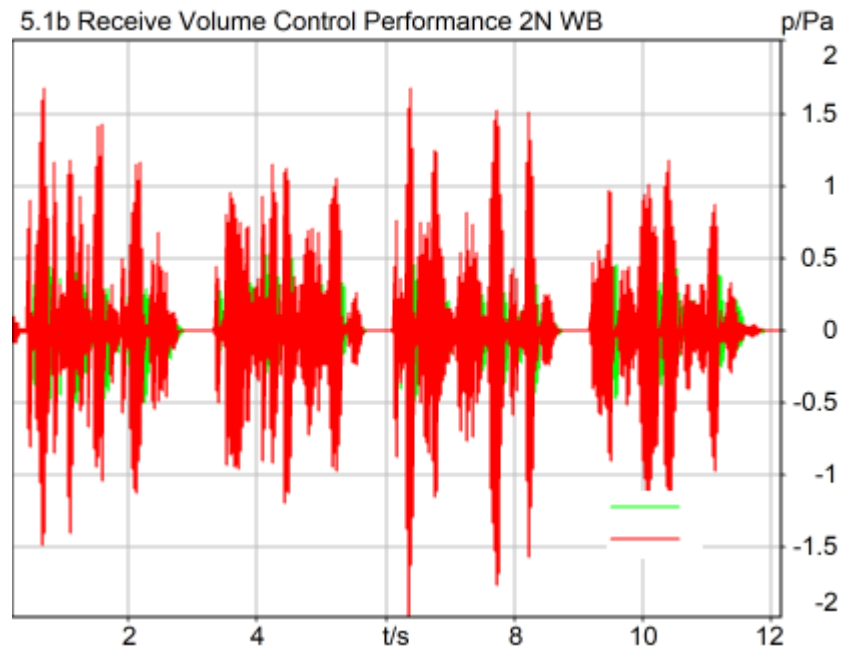
Corrected Speech Level: 17.68 dB[SPL] Ok

Ok

2024/4/2 11:12 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 78.80 dB[SPL], Act.: 83.92%

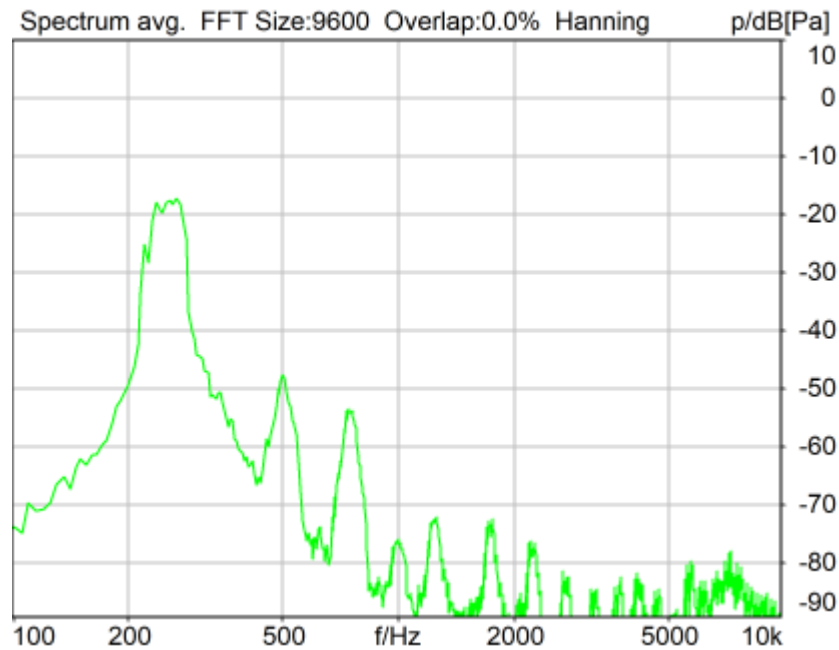
Corrected Speech Level: 8.80 dB[SPL] Ok

Ok

2024/4/2 11:28 ACQUA 5.1.200

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): 31.03 dB (2.81%) Ok

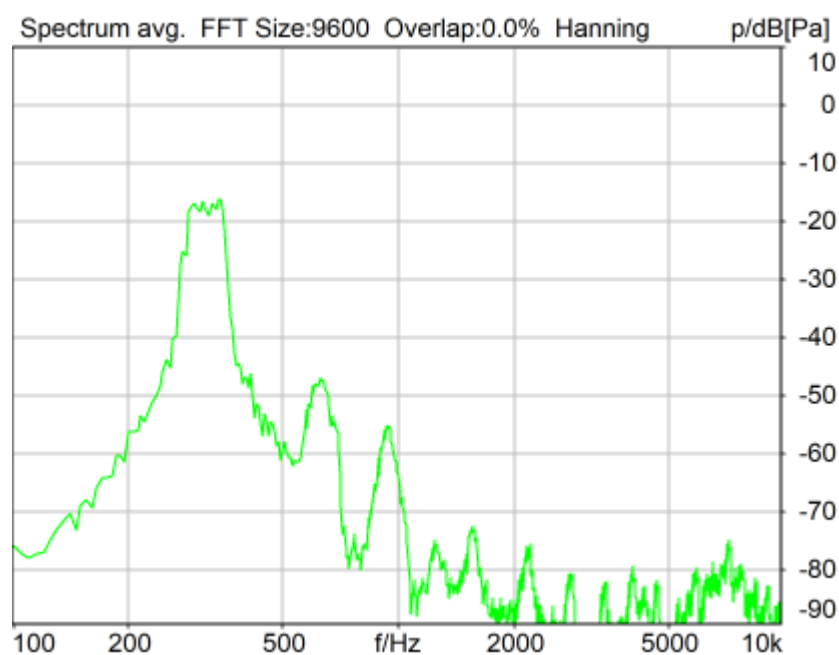
Ok

2024/4/2 11:20 ACQUA 5.1.200

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): 30.08 dB (3.13%) Ok

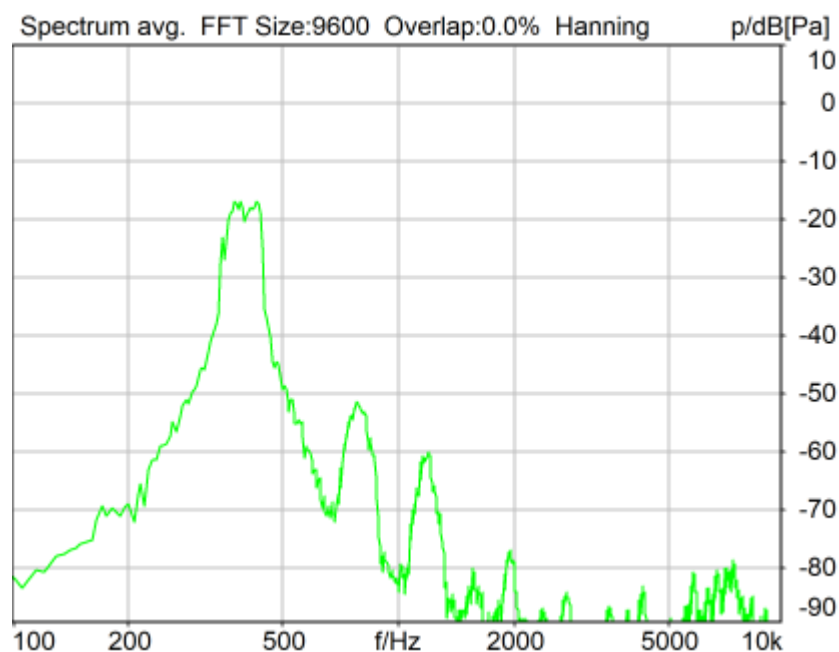
Ok

2024/4/2 11:21 ACQUA 5.1.200

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): 31.07 dB (2.80%) Ok

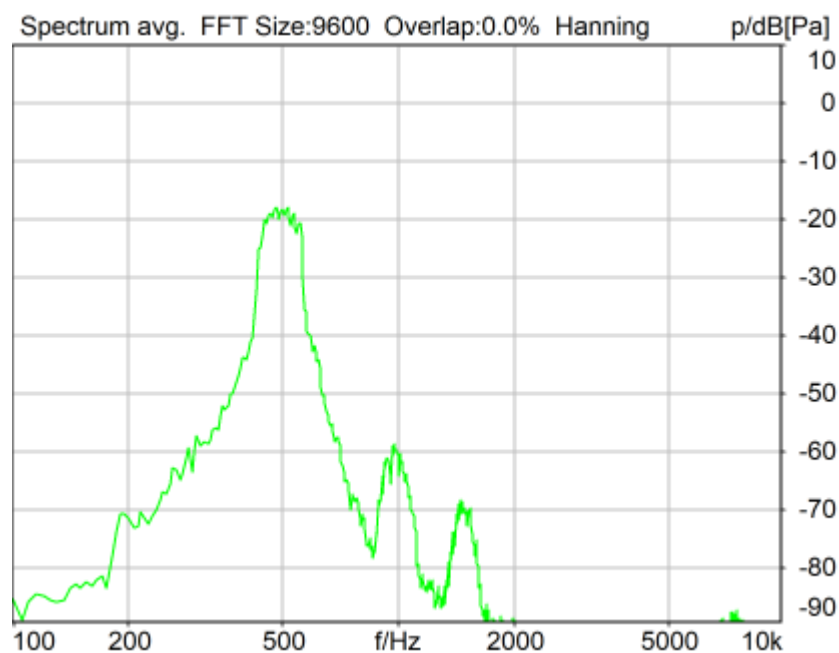
Ok

2024/4/2 11:21 ACQUA 5.1.200

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): 29.48 dB (3.36%) Ok

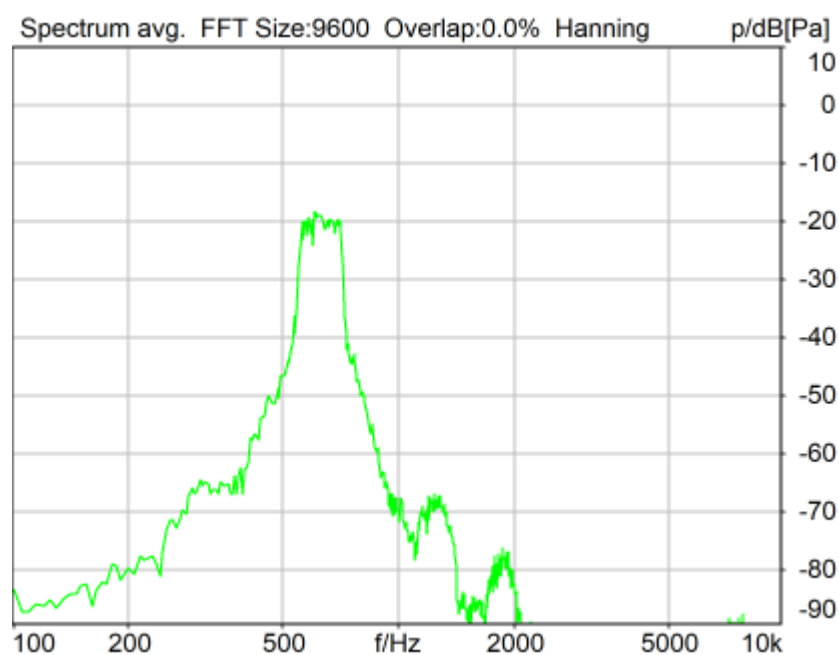
Ok

2024/4/2 11:21 ACQUA 5.1.200

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): 28.62 dB (3.71%) Ok

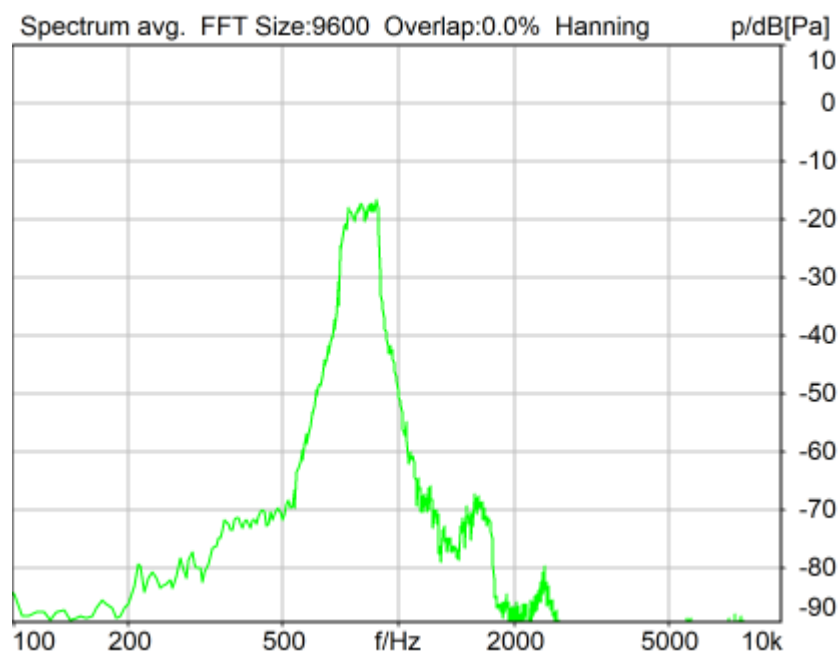
Ok

2024/4/2 11:22 ACQUA 5.1.200

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): 27.07 dB (4.43%) Ok

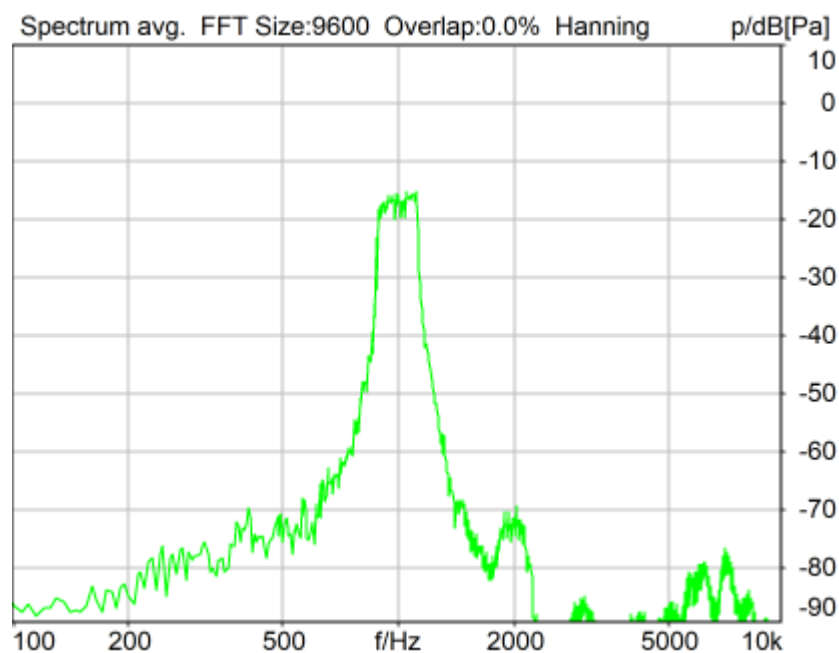
Ok

2024/4/2 11:22 ACQUA 5.1.200

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): 29.41 dB (3.39%) Ok

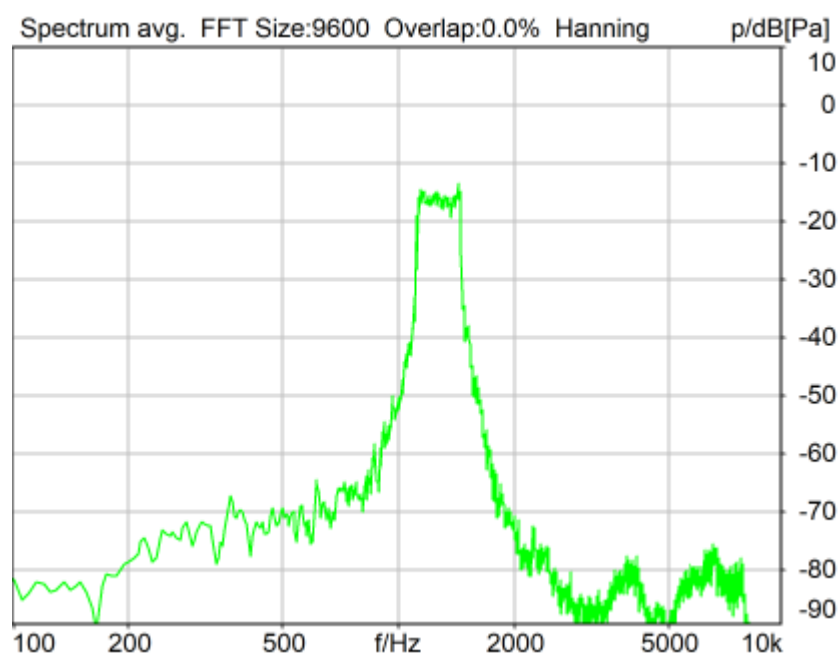
Ok

2024/4/2 11:23 ACQUA 5.1.200

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): 22.99 dB (7.08%) Ok

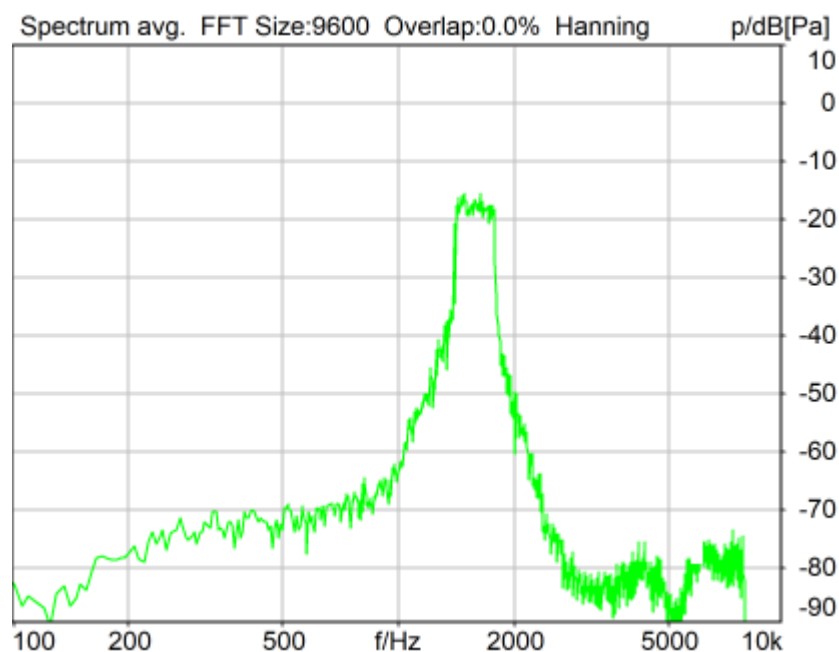
Ok

2024/4/2 11:23 ACQUA 5.1.200

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): 24.35 dB (6.06%) Ok

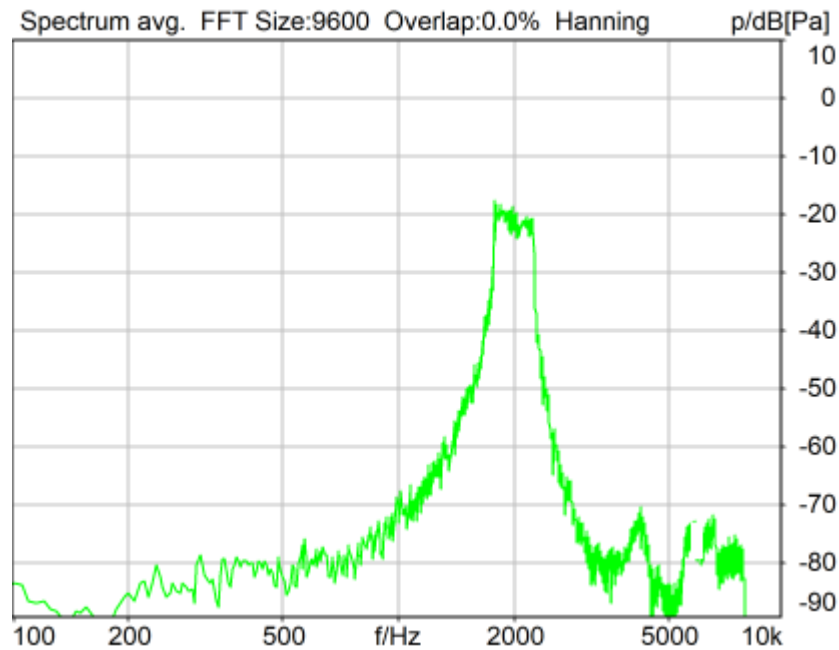
Ok

2024/4/2 11:23 ACQUA 5.1.200

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): 21.25 dB (8.66%) Ok

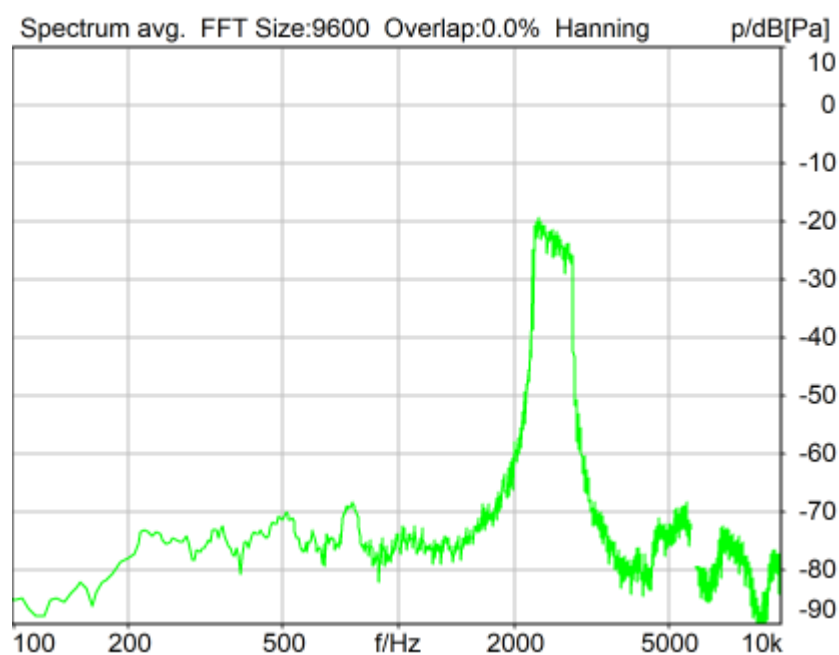
Ok

2024/4/2 11:24 ACQUA 5.1.200

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): 28.89 dB (3.59%) Ok

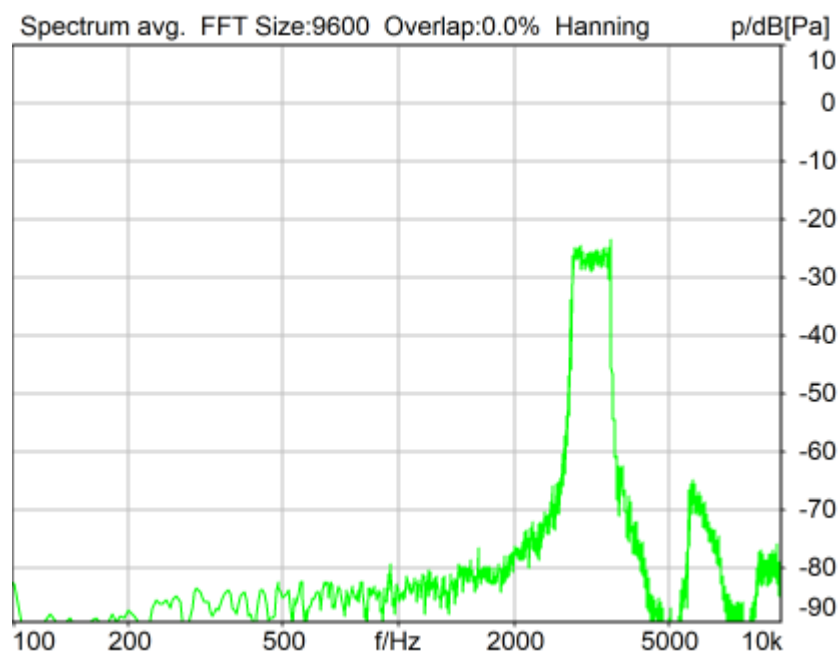
Ok

2024/4/2 11:24 ACQUA 5.1.200

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): 30.83 dB (2.87%) Ok

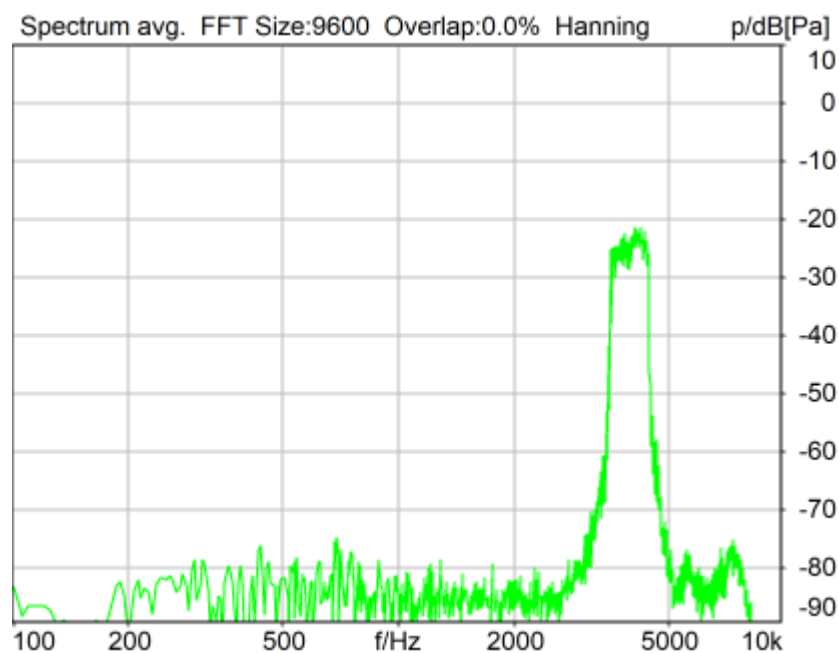
Ok

2024/4/2 11:25 ACQUA 5.1.200

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): 36.29 dB (1.53%) Ok

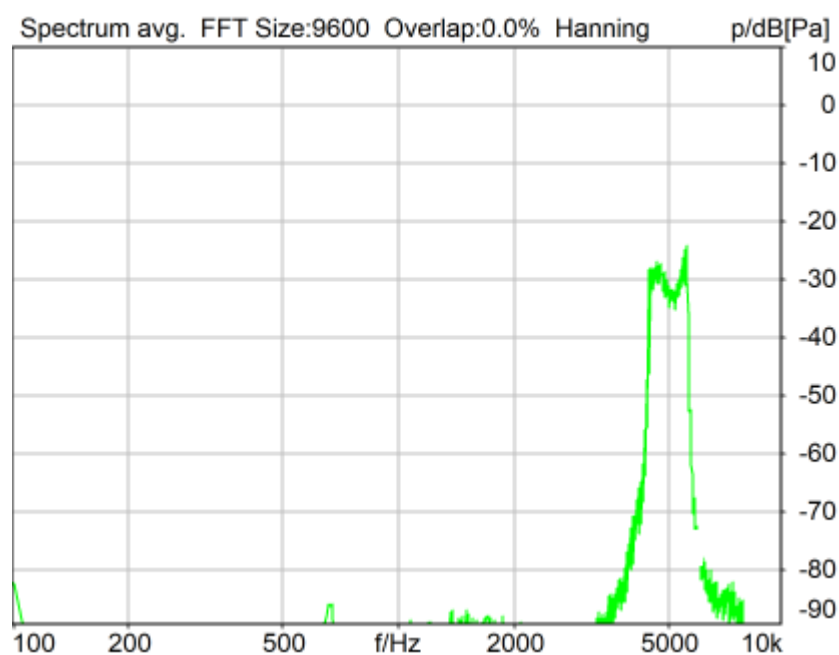
Ok

2024/4/2 11:25 ACQUA 5.1.200

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): 30.80 dB (2.88%) Ok

Ok

2024/4/2 11:25 ACQUA 5.1.200

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	31.03 dB
2	315Hz	30.08 dB
3	400Hz	31.07 dB
4	500Hz	29.48 dB
5	630Hz	28.62 dB
6	800Hz	27.07 dB
7	1000Hz	29.41 dB
8	1250Hz	22.99 dB
9	1600Hz	24.35 dB
10	2000Hz	21.25 dB
11	2500Hz	28.89 dB
12	3150Hz	30.83 dB
13	4000Hz	36.29 dB
14	5000Hz	30.80 dB

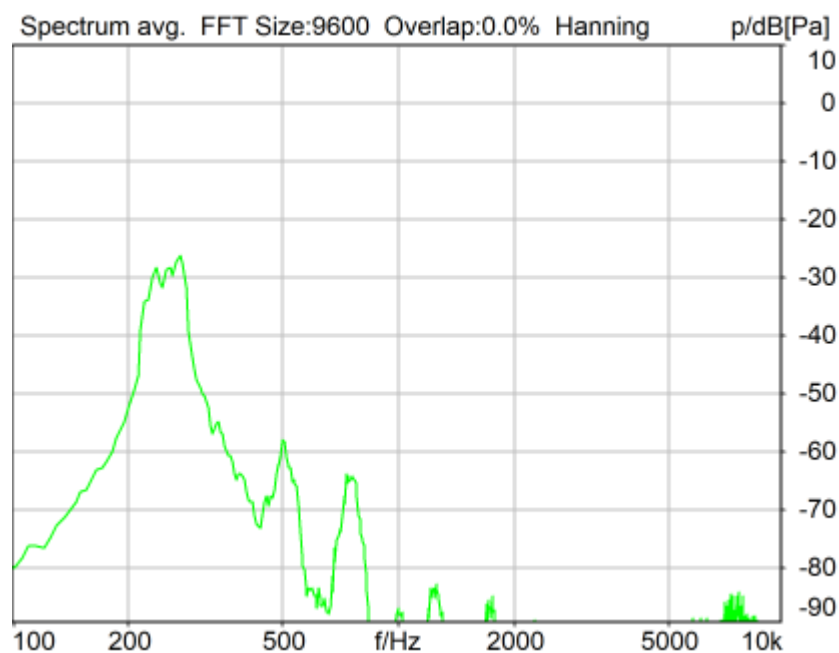
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.25dB at 2000Hz.

2024/4/2 11:25 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): 29.74 dB (3.26%) Ok

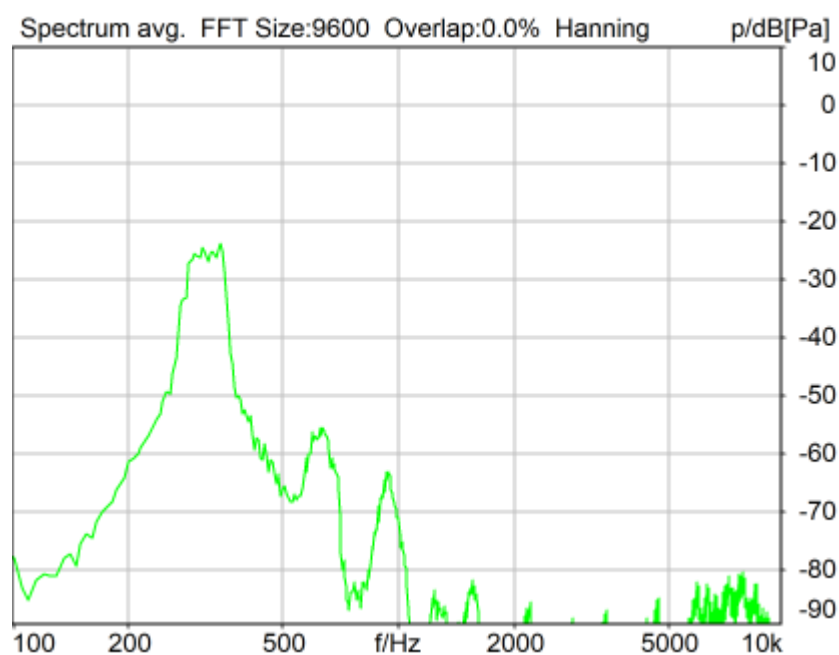
Ok

2024/4/2 11:28 ACQUA 5.1.200

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): 29.50 dB (3.35%) Ok

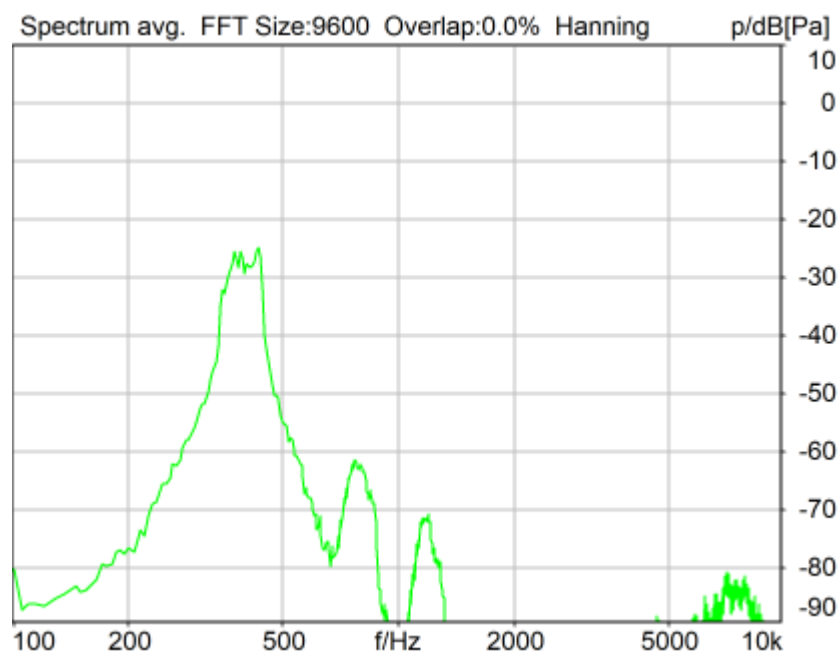
Ok

2024/4/2 11:29 ACQUA 5.1.200

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): 29.76 dB (3.25%) Ok

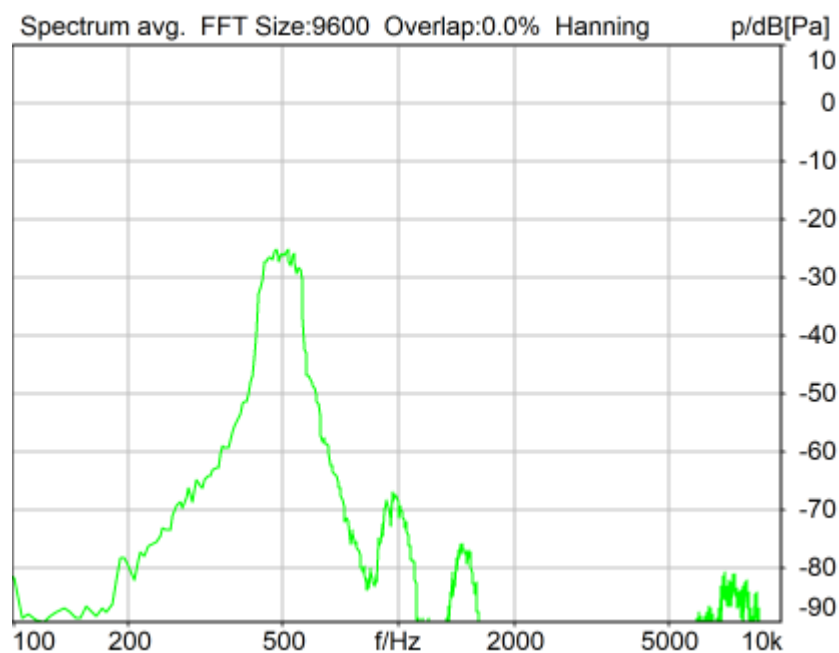
Ok

2024/4/2 11:29 ACQUA 5.1.200

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): 29.38 dB (3.40%) Ok

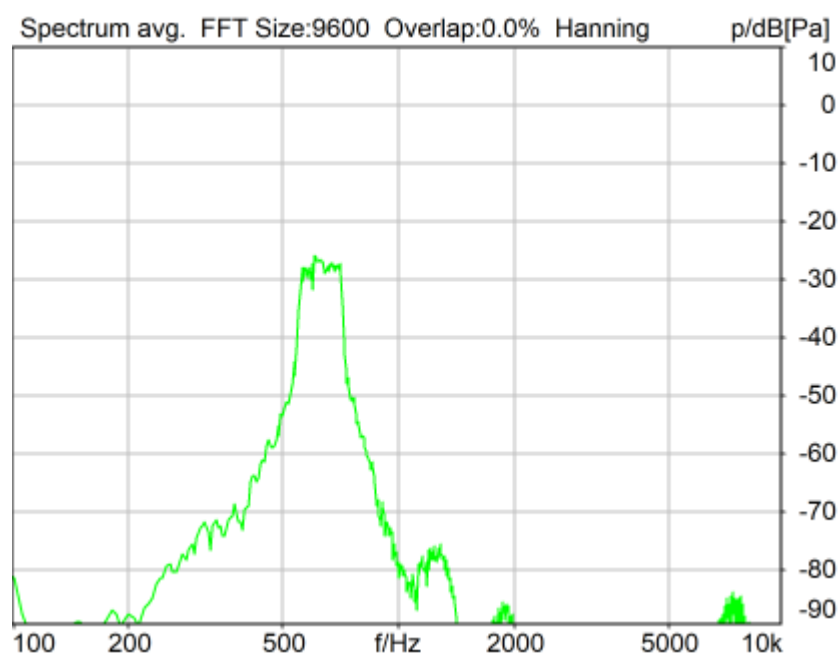
Ok

2024/4/2 11:29 ACQUA 5.1.200

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): 27.98 dB (3.99%) Ok

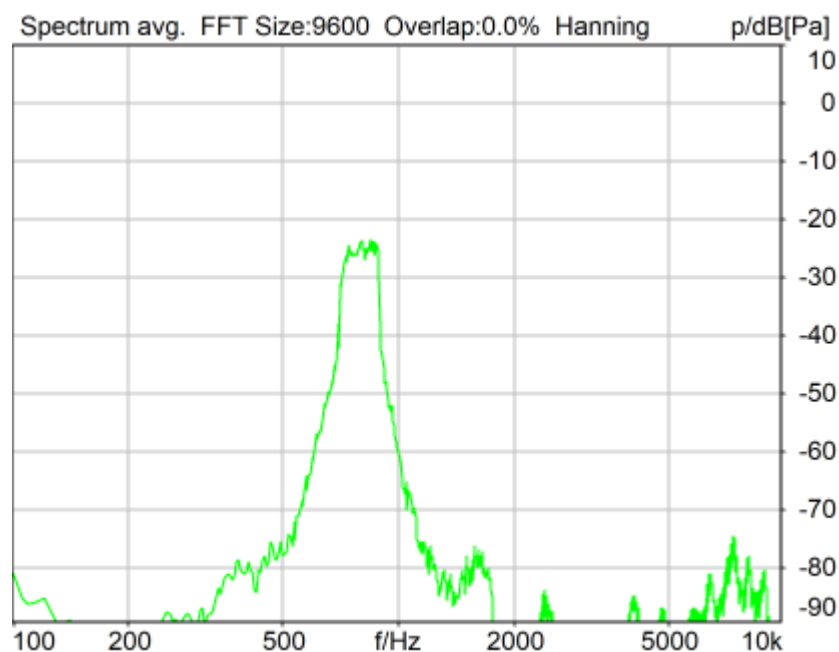
Ok

2024/4/2 11:30 ACQUA 5.1.200

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): 29.27 dB (3.44%) Ok

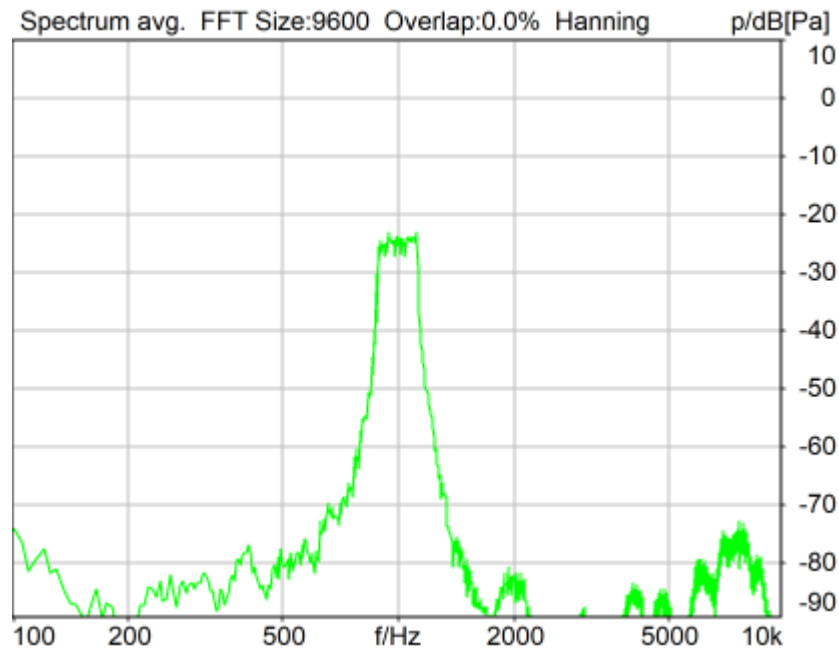
Ok

2024/4/2 11:30 ACQUA 5.1.200

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): 29.20 dB (3.47%) Ok

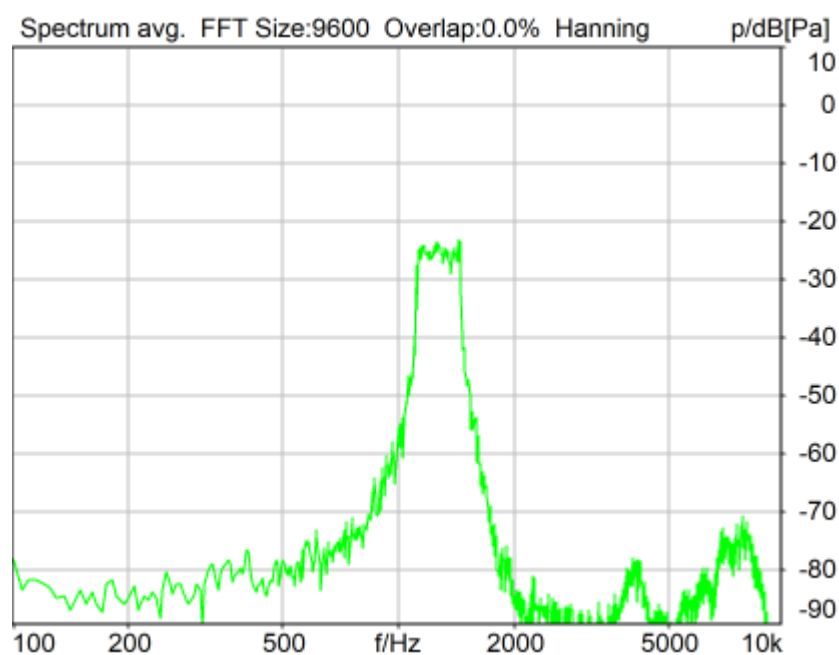
Ok

2024/4/2 11:31 ACQUA 5.1.200

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): 21.01 dB (8.90%) Ok

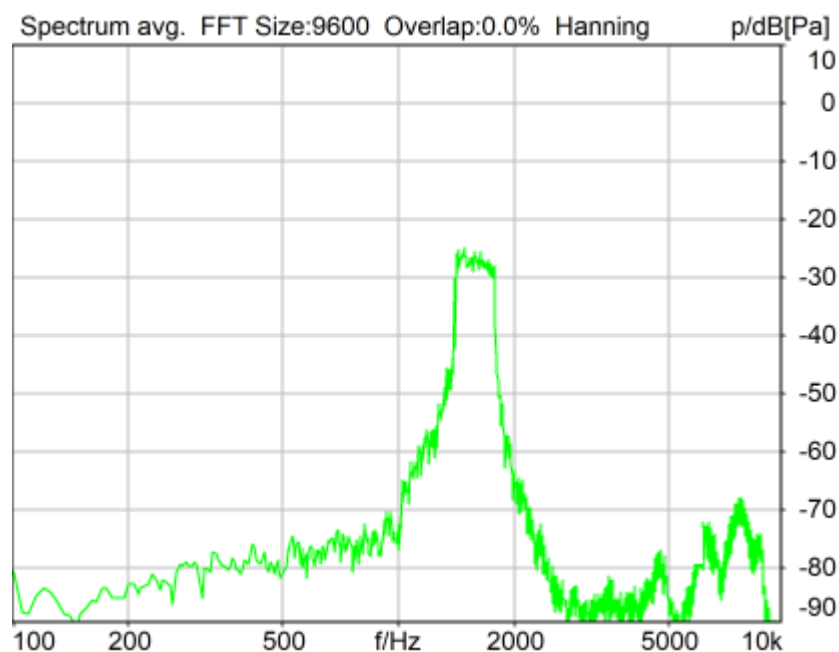
Ok

2024/4/2 11:31 ACQUA 5.1.200

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): 24.63 dB (5.86%) Ok

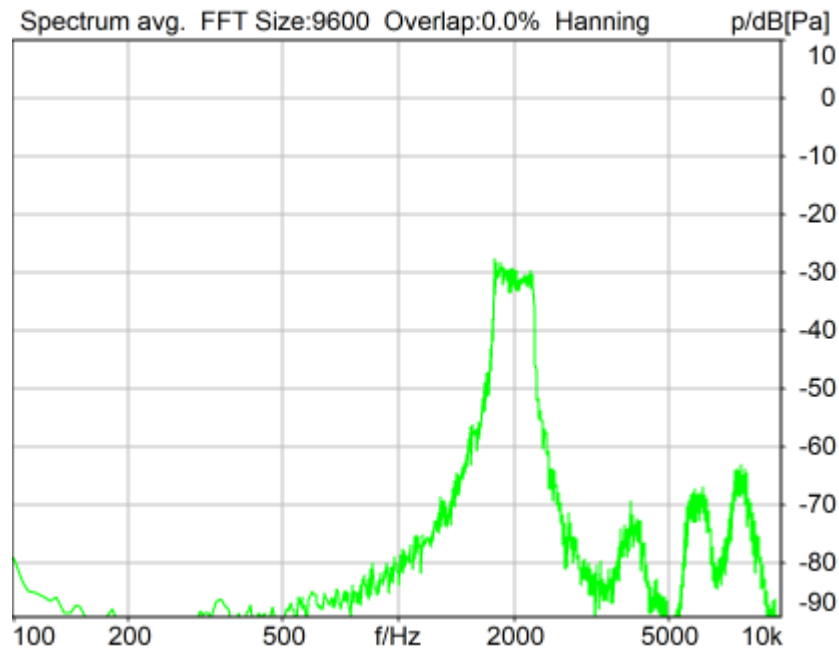
Ok

2024/4/2 11:31 ACQUA 5.1.200

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): 21.58 dB (8.34%) Ok

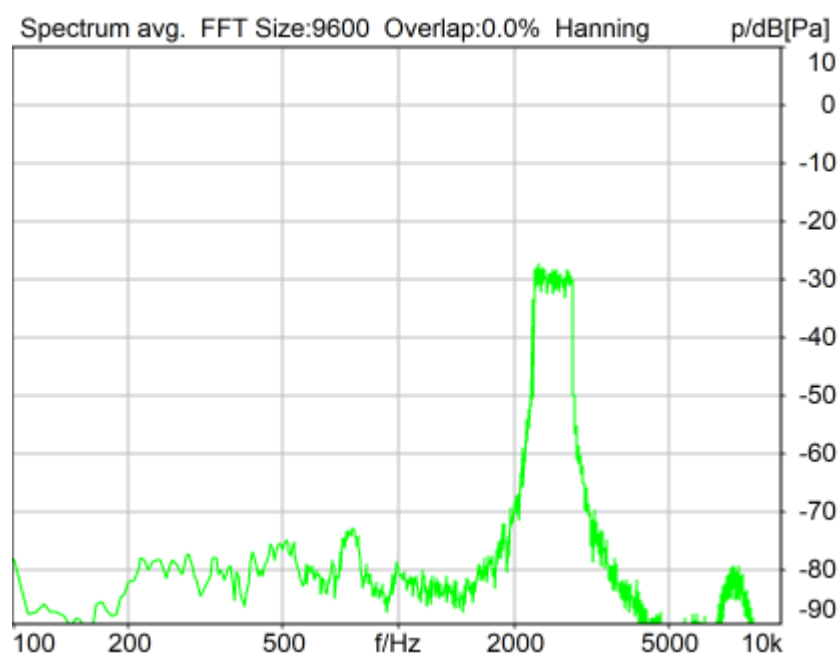
Ok

2024/4/2 11:32 ACQUA 5.1.200

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): 29.47 dB (3.36%) Ok

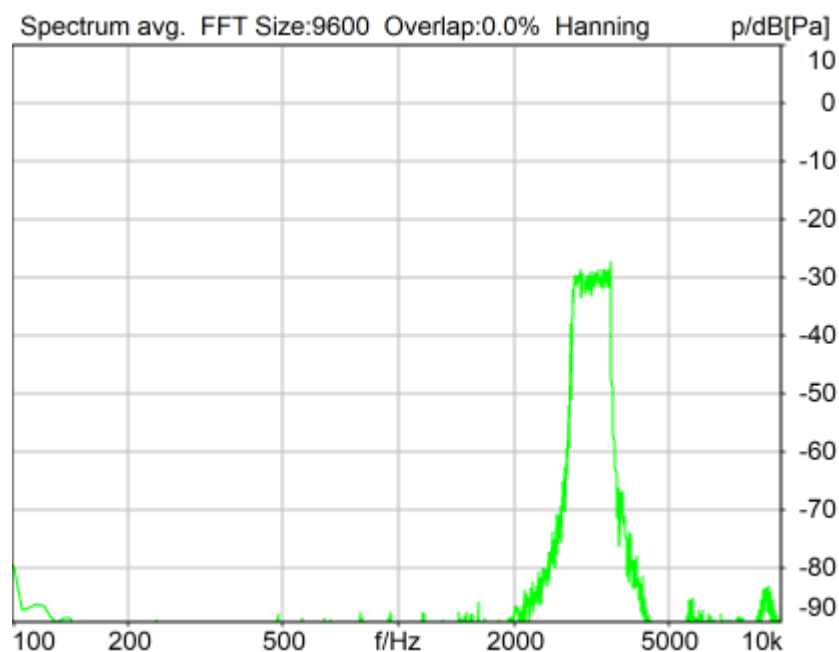
Ok

2024/4/2 11:32 ACQUA 5.1.200

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): 31.73 dB (2.59%) Ok

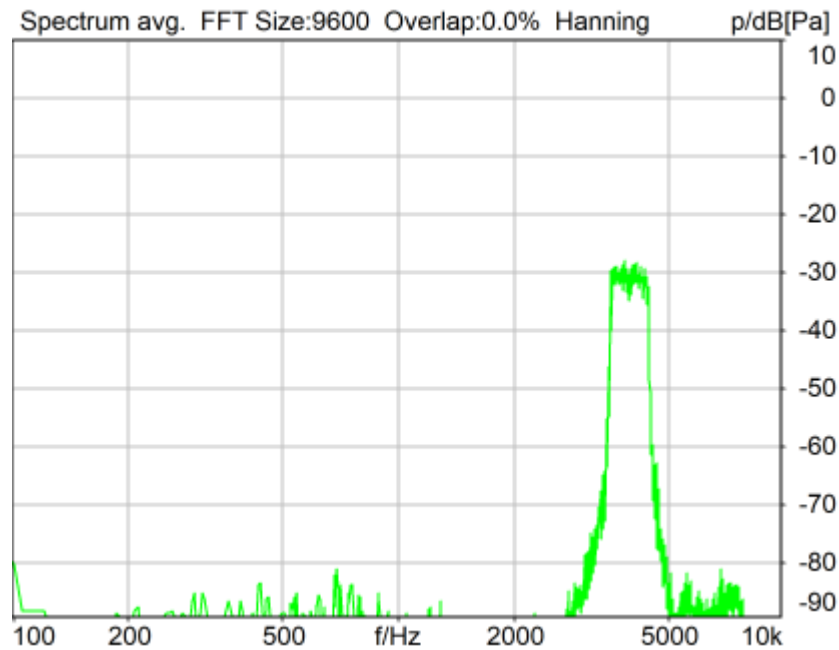
Ok

2024/4/2 11:33 ACQUA 5.1.200

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): 33.61 dB (2.09%) Ok

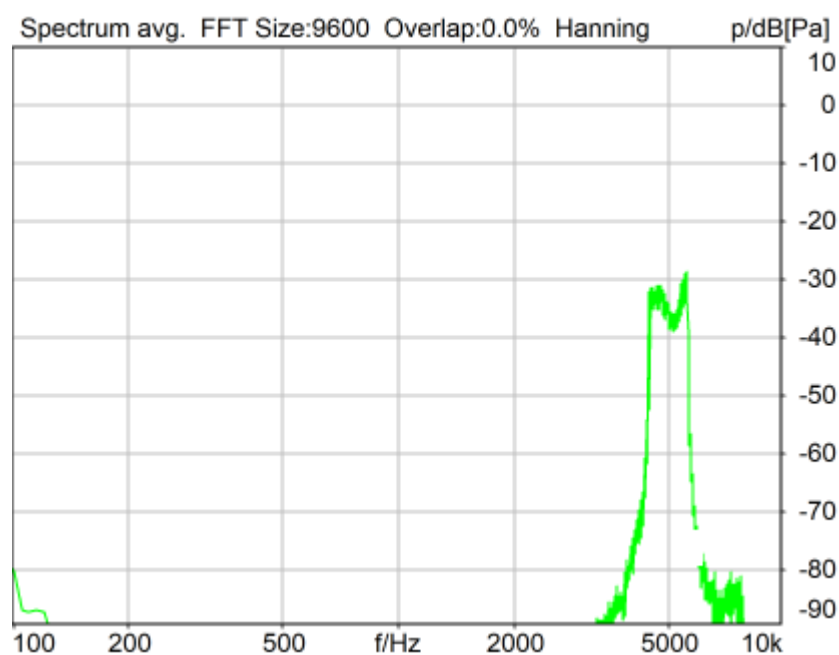
Ok

2024/4/2 11:33 ACQUA 5.1.200

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): 31.79 dB (2.57%) Ok

Ok

2024/4/2 11:33 ACQUA 5.1.200

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	29.74 dB
2	315Hz	29.50 dB
3	400Hz	29.76 dB
4	500Hz	29.38 dB
5	630Hz	27.98 dB
6	800Hz	29.27 dB
7	1000Hz	29.20 dB
8	1250Hz	21.01 dB
9	1600Hz	24.63 dB
10	2000Hz	21.58 dB
11	2500Hz	29.47 dB
12	3150Hz	31.73 dB
13	4000Hz	33.61 dB
14	5000Hz	31.79 dB

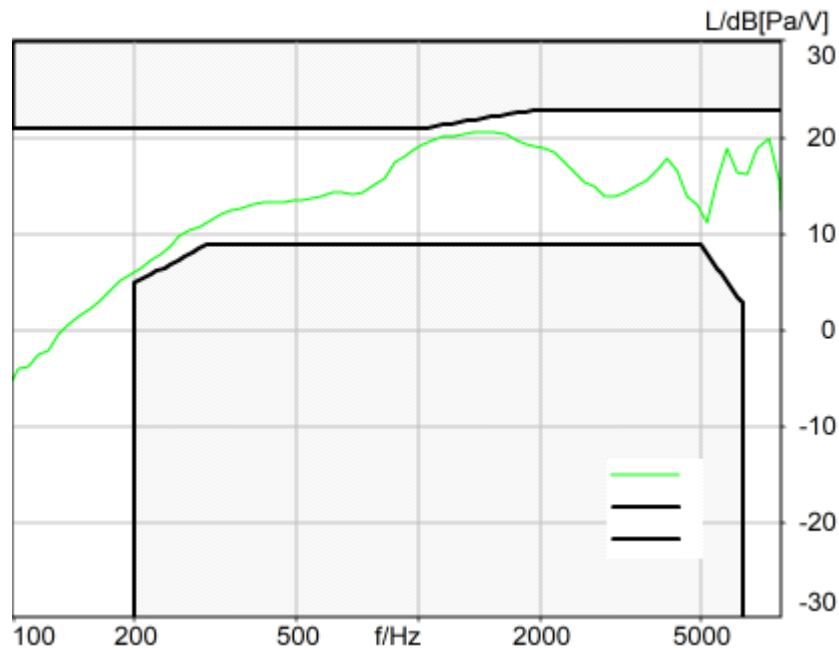
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.01dB at 1250Hz.

2024/4/2 11:34 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



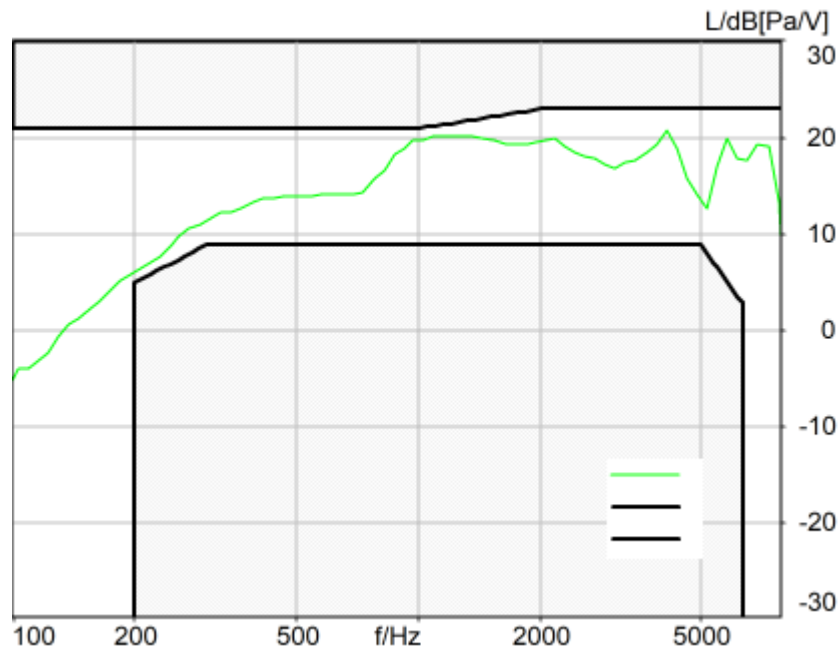
Absolute minimal distance
1.23 dB at 1285.9 Hz Ok

Ok

2024/4/2 11:26 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



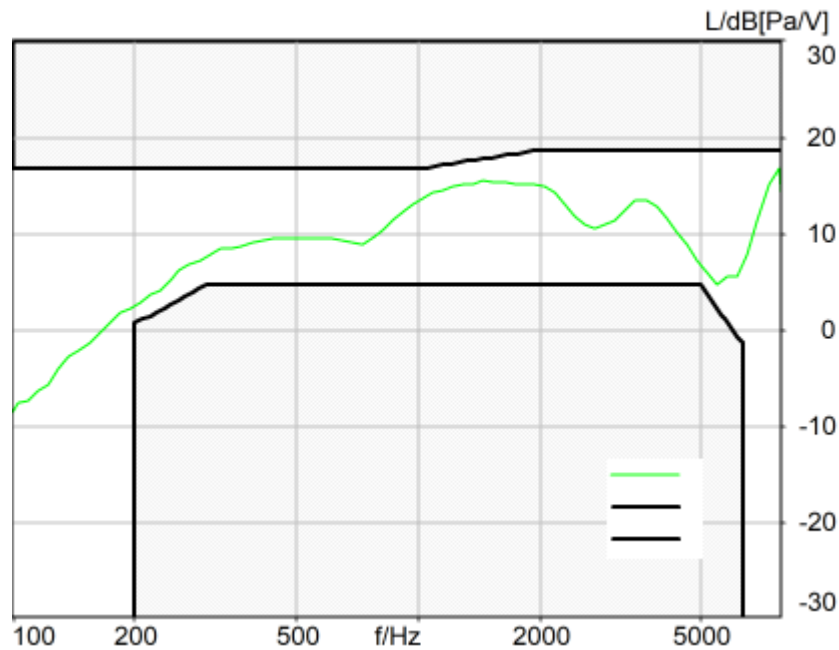
Absolute minimal distance
1.15 dB at 1088.7 Hz Ok

Ok

2024/4/2 11:26 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



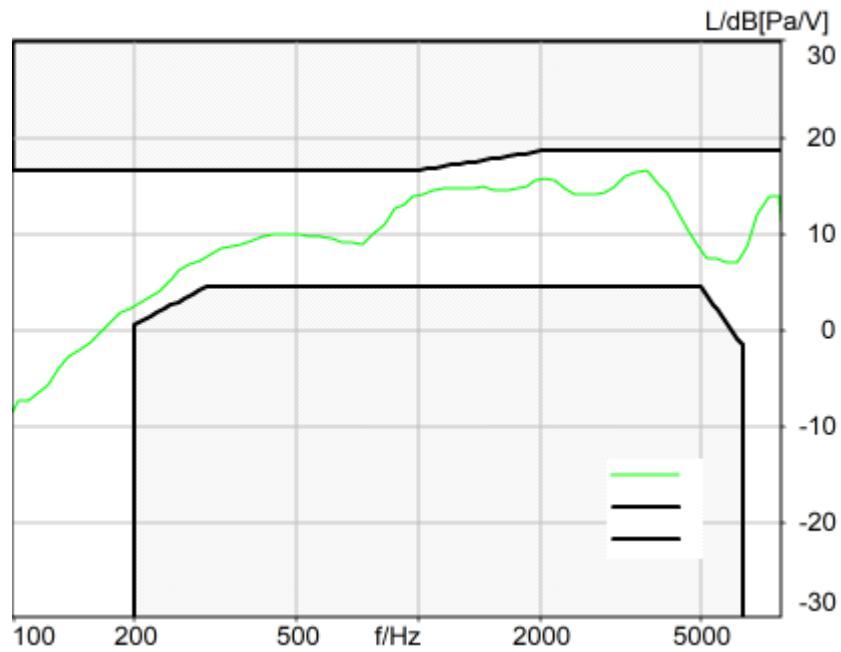
Absolute minimal distance
1.94 dB at 7764.8 Hz Ok

Ok

2024/3/22 13:25 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF, Index: 1

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



Absolute minimal distance
2.08 dB at 205.7 Hz Ok

Ok

2024/3/22 13:26 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

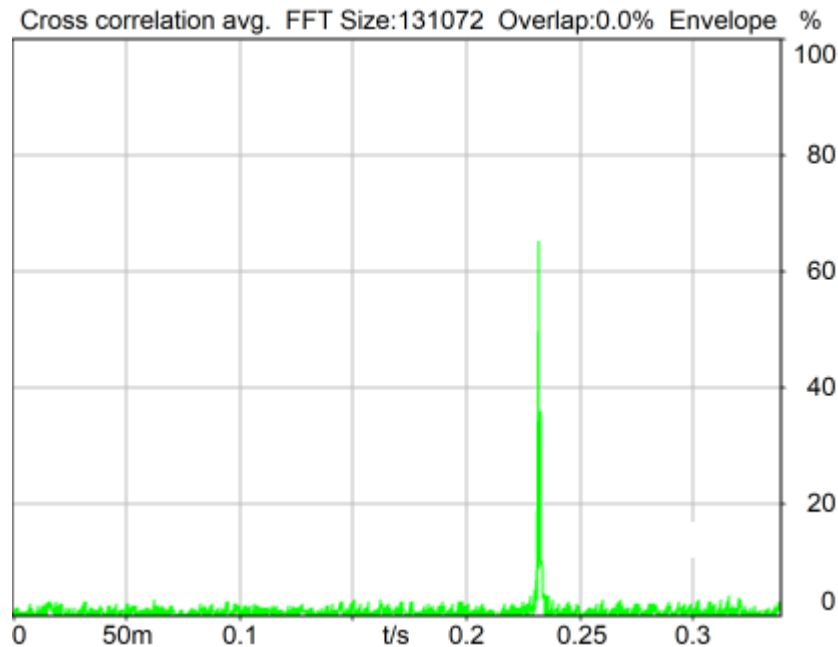
Measurement Object	WIFI 5.2G_802.11a 6M_EVS NB 24.4kbps_CH40
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:16
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



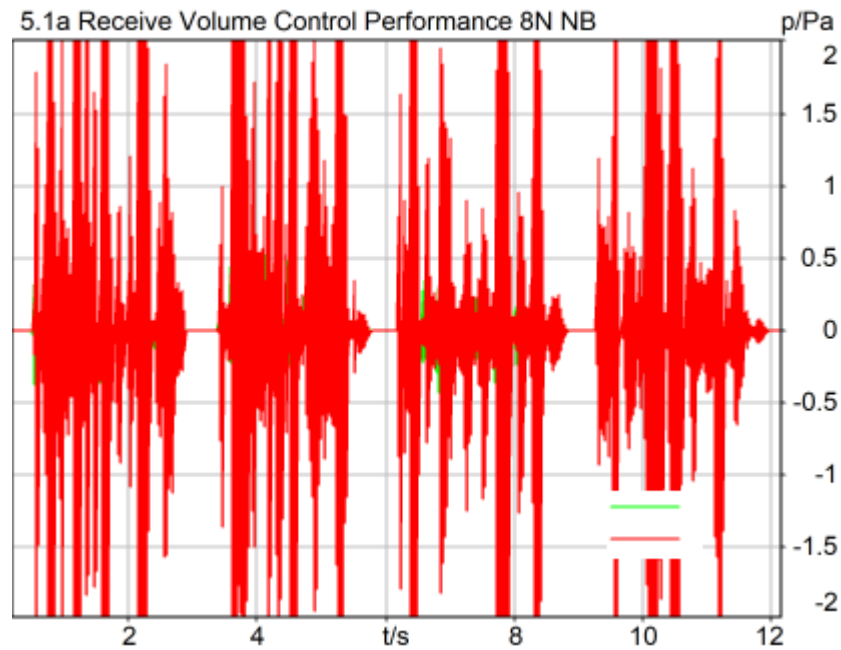
Delay (Cross): 232.6 ms

2024/4/2 12:49 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.35 dB[SPL], Act.: 80.41%

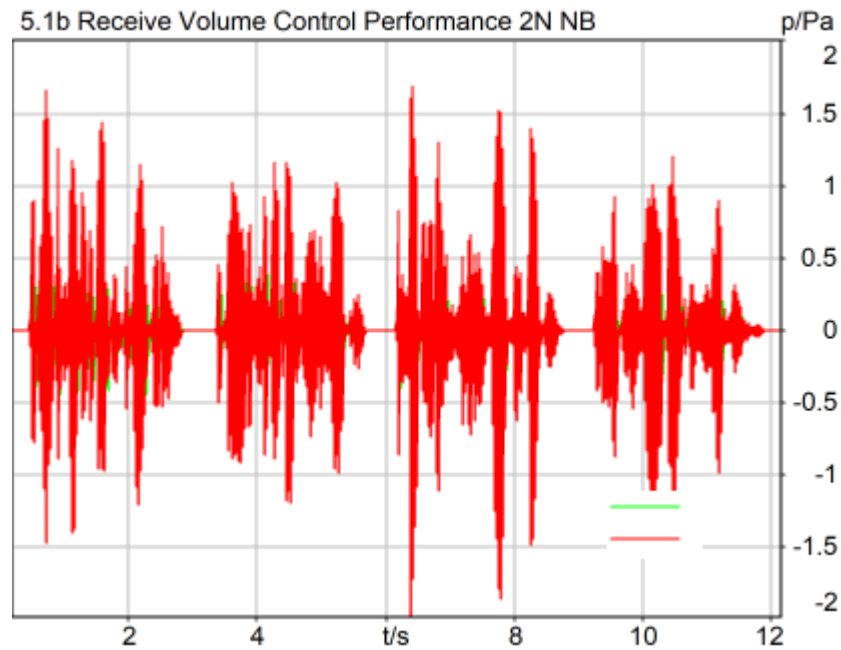
Corrected Speech Level: 17.35 dB[SPL] Ok

Ok

2024/4/2 12:50 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 78.79 dB[SPL], Act.: 83.06%

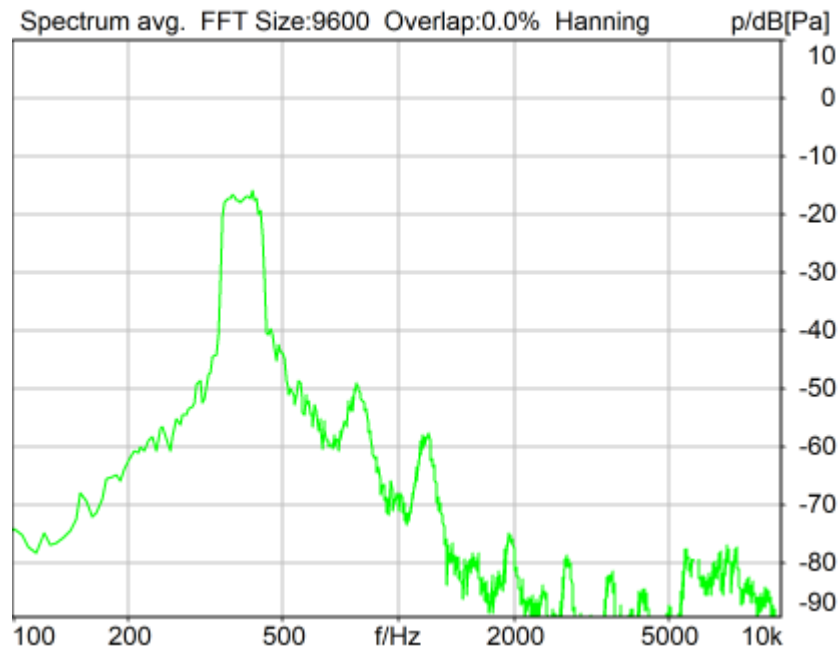
Corrected Speech Level: 8.79 dB[SPL] Ok

Ok

2024/4/2 13:14 ACQUA 5.1.200

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): 29.54 dB (3.34%) Ok

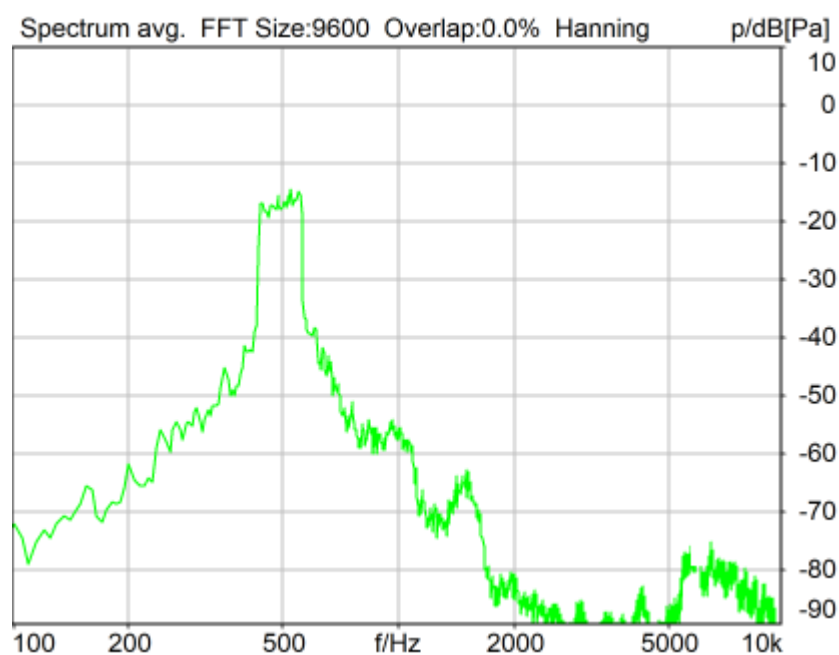
Ok

2024/4/2 12:50 ACQUA 5.1.200

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): 27.58 dB (4.18%) Ok

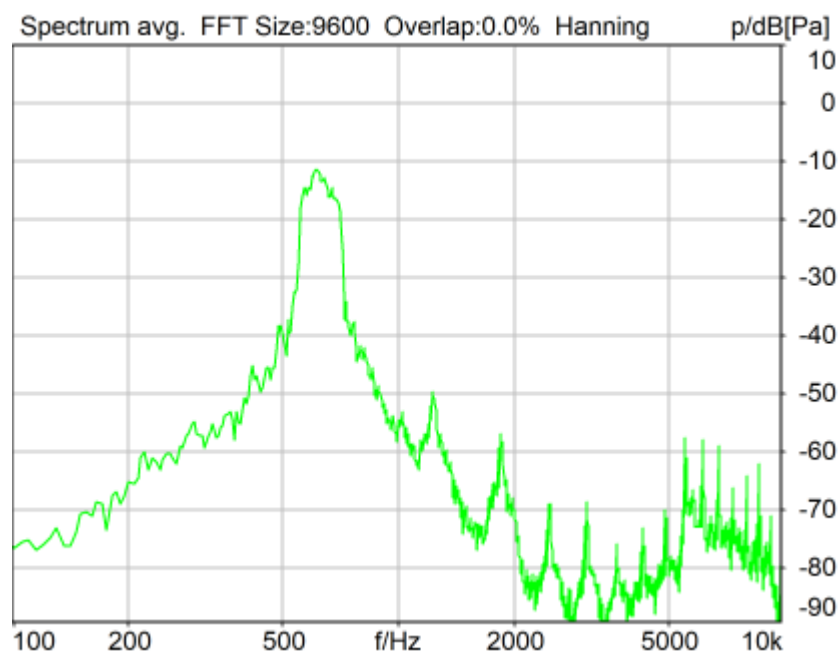
Ok

2024/4/2 12:51 ACQUA 5.1.200

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): 27.51 dB (4.21%) Ok

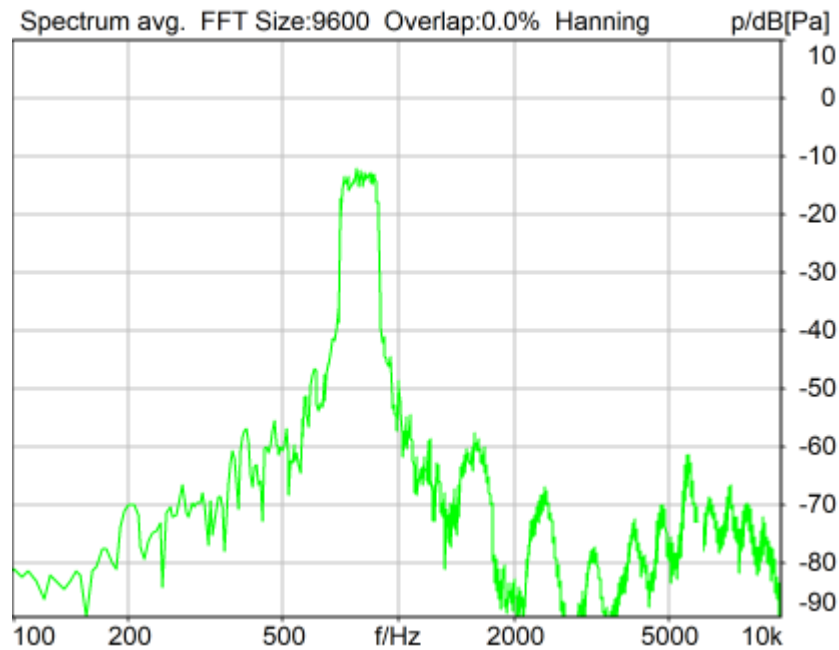
Ok

2024/4/2 12:51 ACQUA 5.1.200

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): 33.90 dB (2.02%) Ok

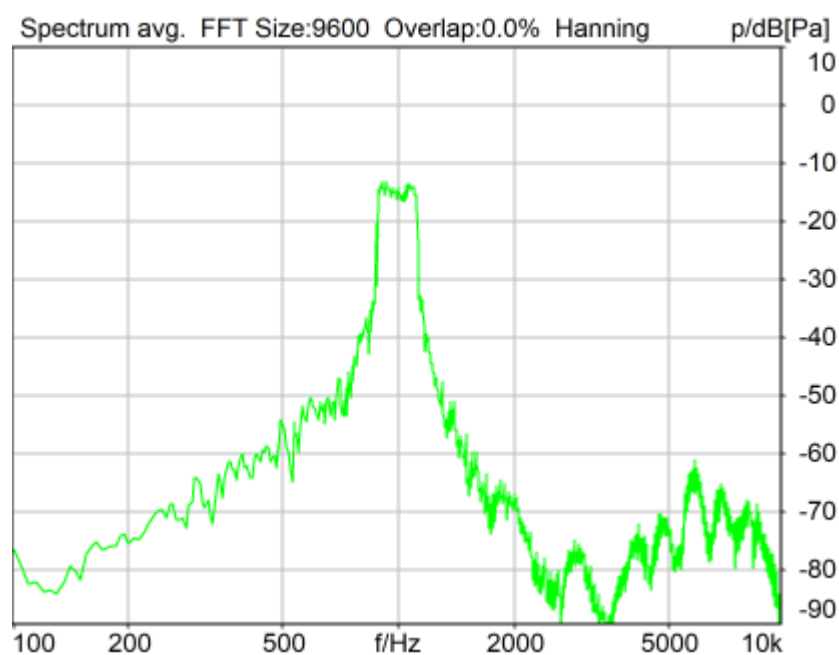
Ok

2024/4/2 12:52 ACQUA 5.1.200

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): 26.59 dB (4.68%) Ok

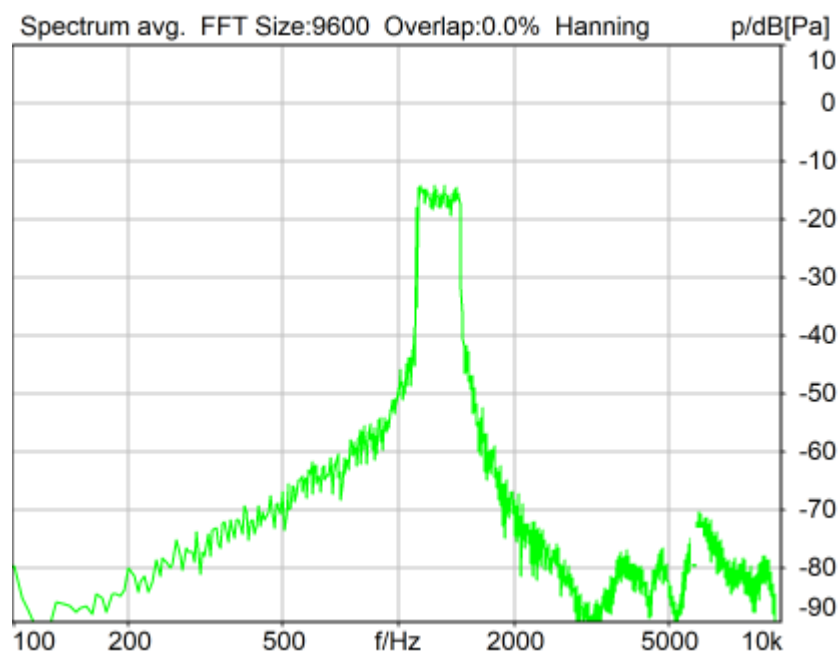
Ok

2024/4/2 12:52 ACQUA 5.1.200

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): 27.96 dB (4.00%) Ok

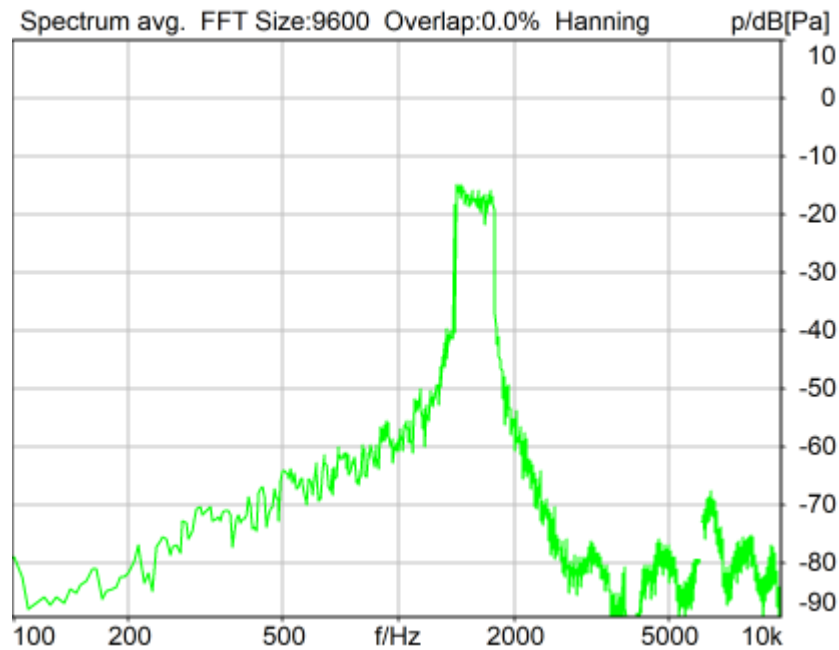
Ok

2024/4/2 12:52 ACQUA 5.1.200

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): 28.61 dB (3.71%) Ok

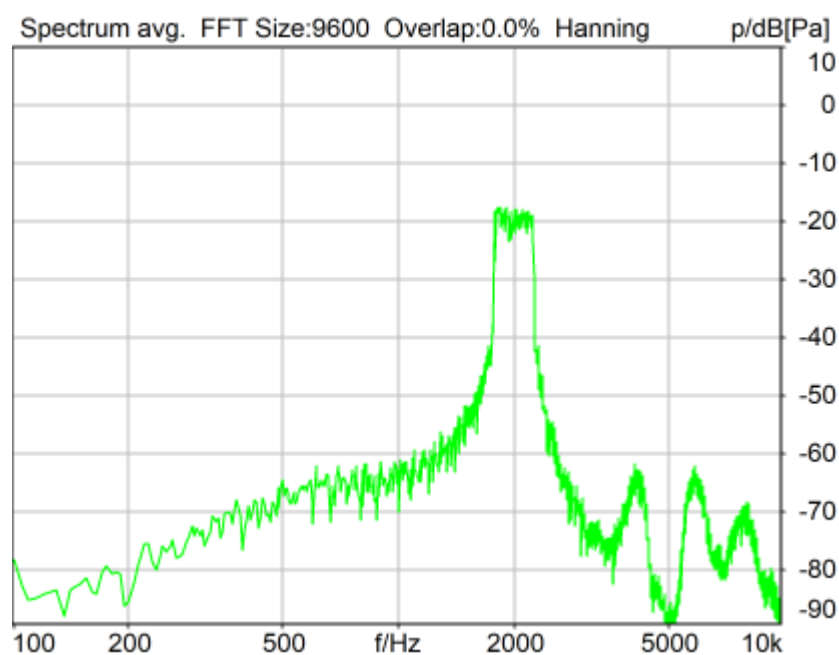
Ok

2024/4/2 12:53 ACQUA 5.1.200

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): 26.83 dB (4.55%) Ok

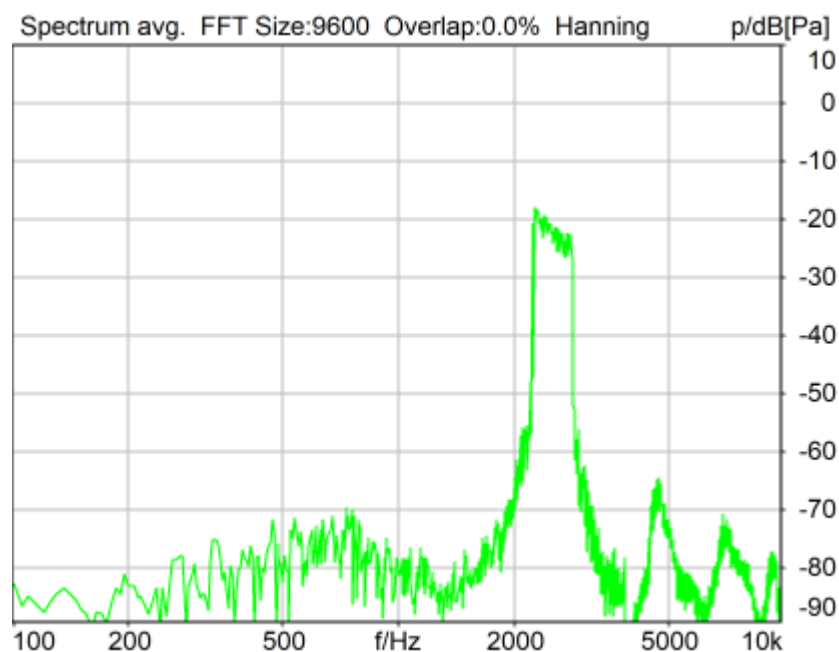
Ok

2024/4/2 12:53 ACQUA 5.1.200

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): 37.52 dB (1.33%) Ok

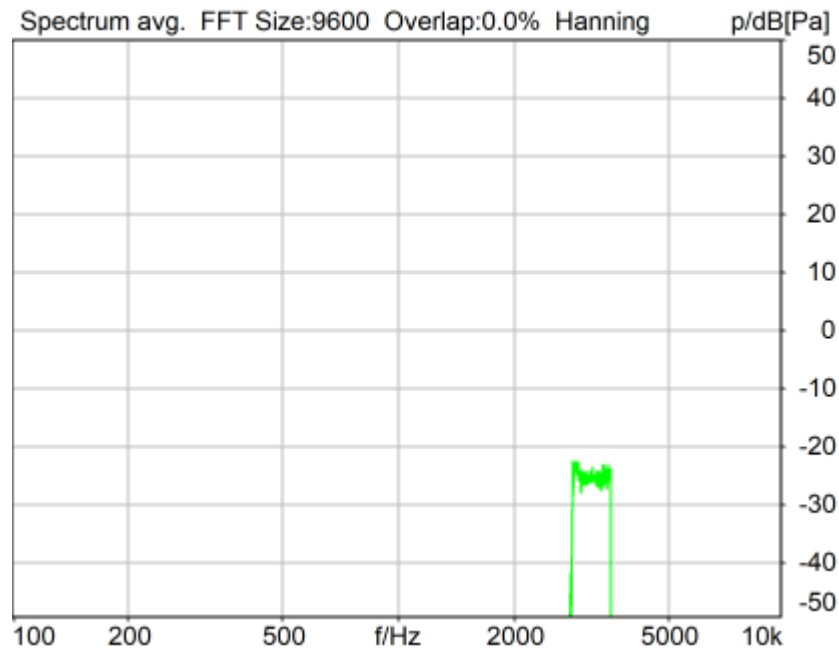
Ok

2024/4/2 12:54 ACQUA 5.1.200

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): 41.21 dB (0.87%) Ok

Ok

2024/4/2 12:54 ACQUA 5.1.200

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

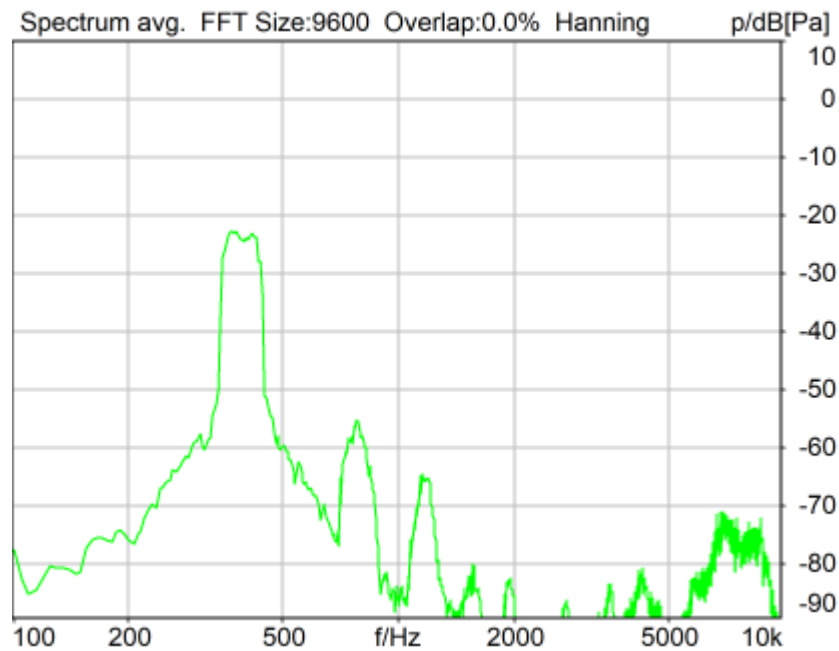
Region	Frequency	SDNR
1	400Hz	29.54 dB
2	500Hz	27.58 dB
3	630Hz	27.51 dB
4	800Hz	33.90 dB
5	1000Hz	26.59 dB
6	1250Hz	27.96 dB
7	1600Hz	28.61 dB
8	2000Hz	26.83 dB
9	2500Hz	37.52 dB
10	3150Hz	41.21 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 26.59dB at 1000Hz.

2024/4/2 12:54 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): 30.95 dB (2.83%) Ok

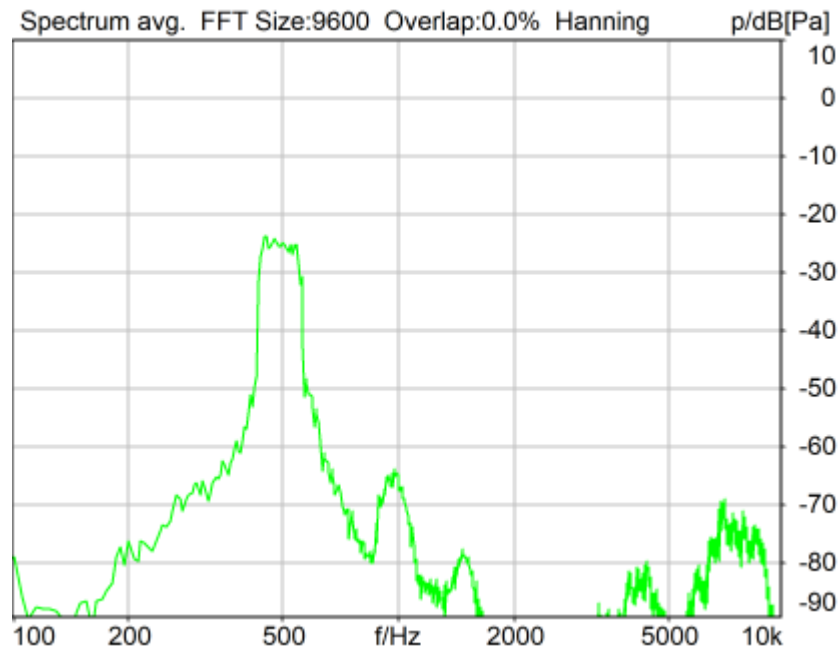
Ok

2024/4/2 13:15 ACQUA 5.1.200

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): 32.06 dB (2.49%) Ok

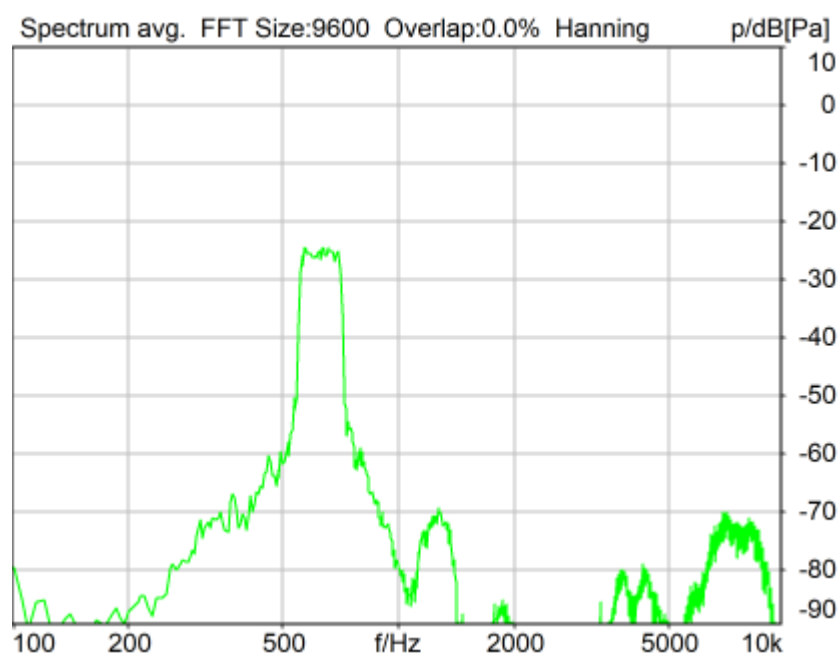
Ok

2024/4/2 13:15 ACQUA 5.1.200

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): 32.82 dB (2.29%) Ok

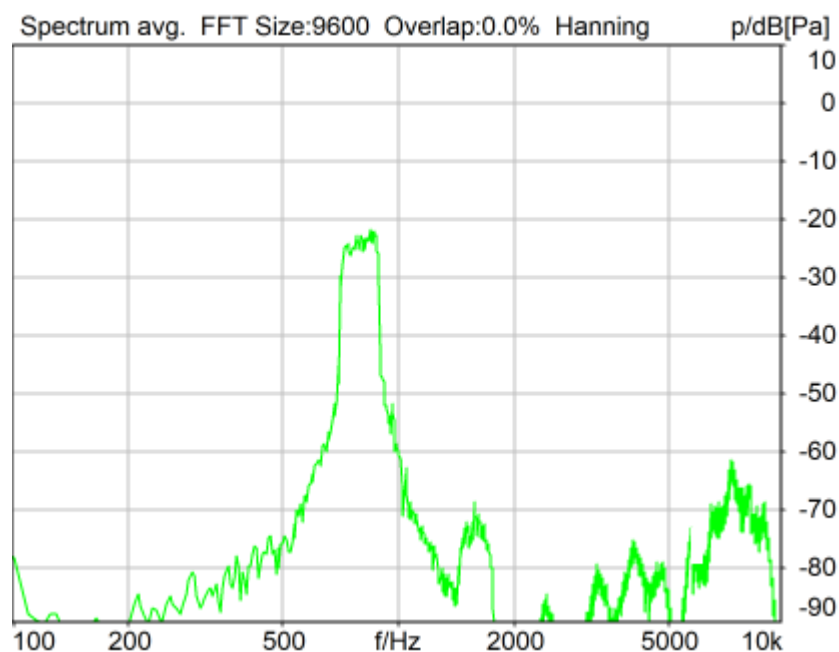
Ok

2024/4/2 13:16 ACQUA 5.1.200

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): 30.35 dB (3.04%) Ok

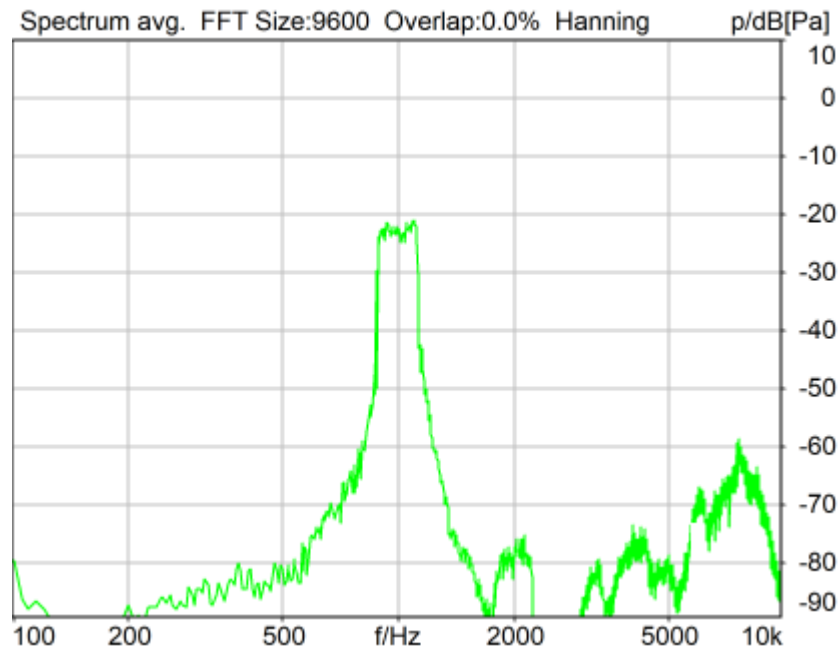
Ok

2024/4/2 13:16 ACQUA 5.1.200

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): 30.12 dB (3.12%) Ok

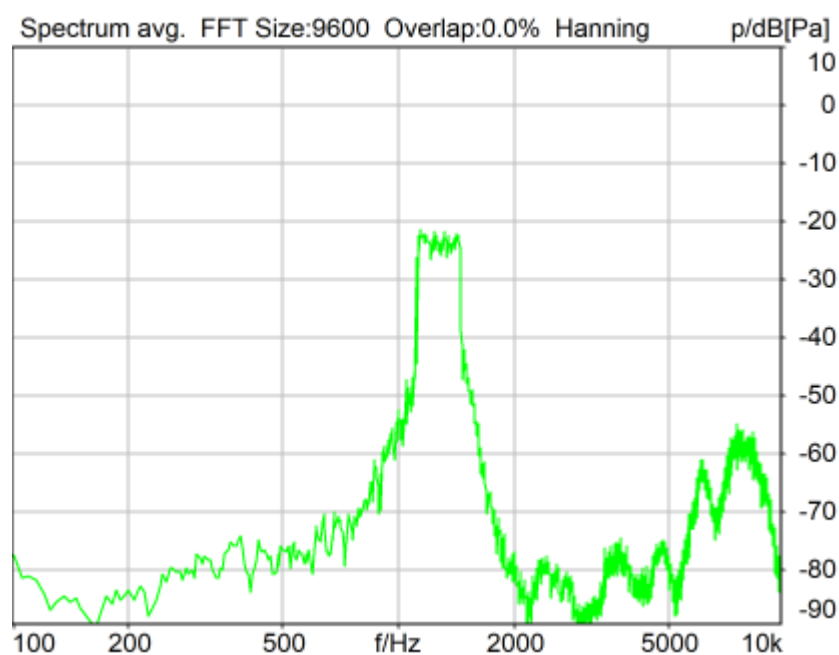
Ok

2024/4/2 13:16 ACQUA 5.1.200

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): 23.46 dB (6.71%) Ok

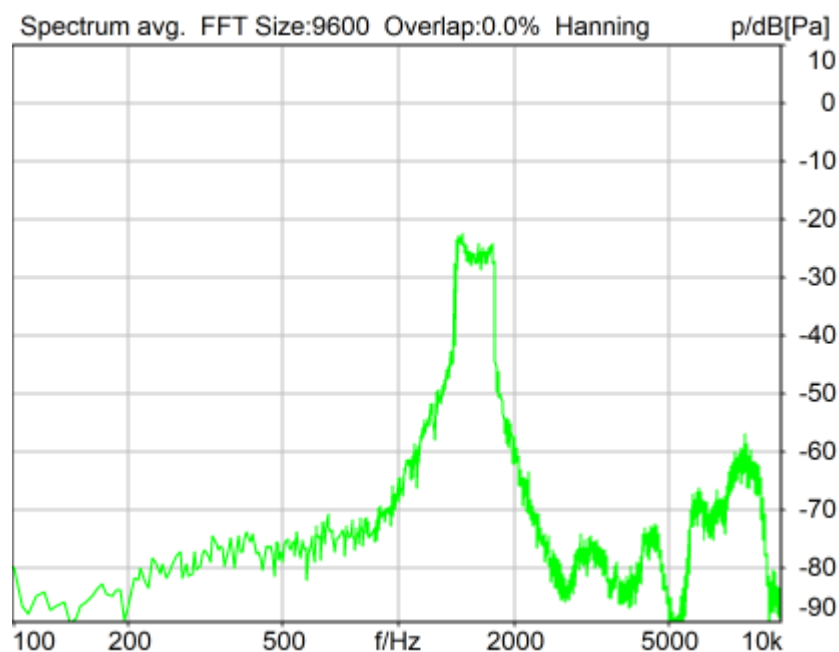
Ok

2024/4/2 13:17 ACQUA 5.1.200

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): 23.57 dB (6.63%) Ok

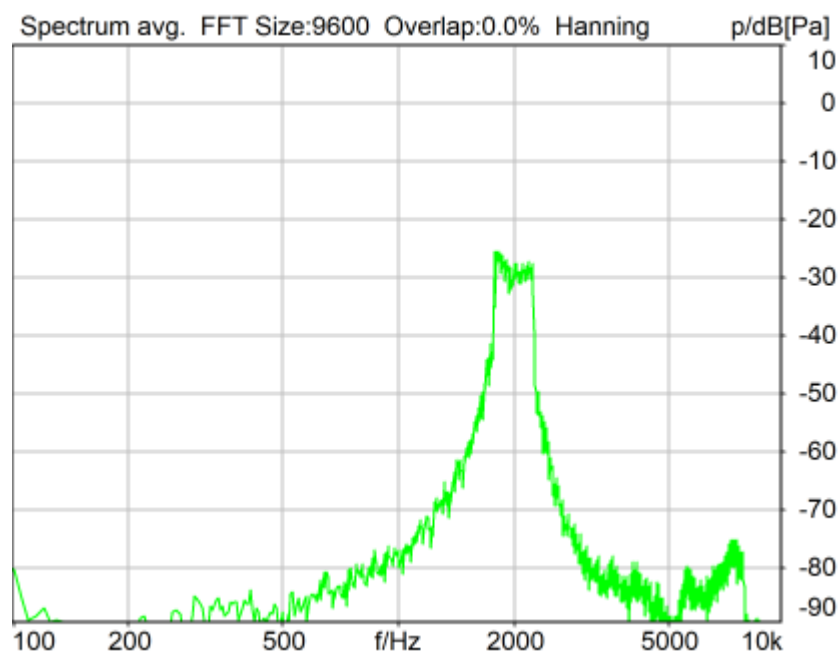
Ok

2024/4/2 13:17 ACQUA 5.1.200

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): 21.58 dB (8.33%) Ok

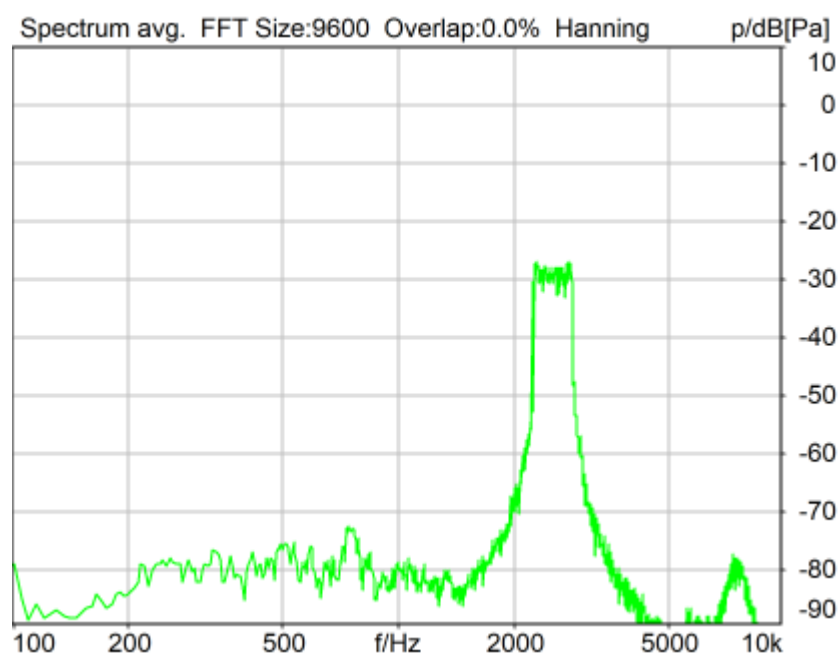
Ok

2024/4/2 13:18 ACQUA 5.1.200

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): 29.42 dB (3.38%) Ok

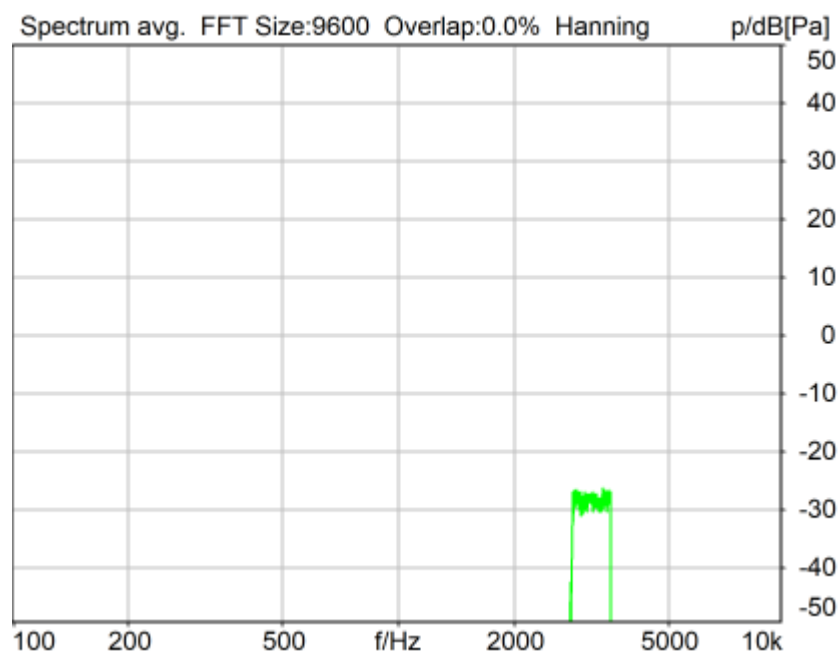
Ok

2024/4/2 13:18 ACQUA 5.1.200

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): 32.47 dB (2.38%) Ok

Ok

2024/4/2 13:18 ACQUA 5.1.200

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	30.95 dB

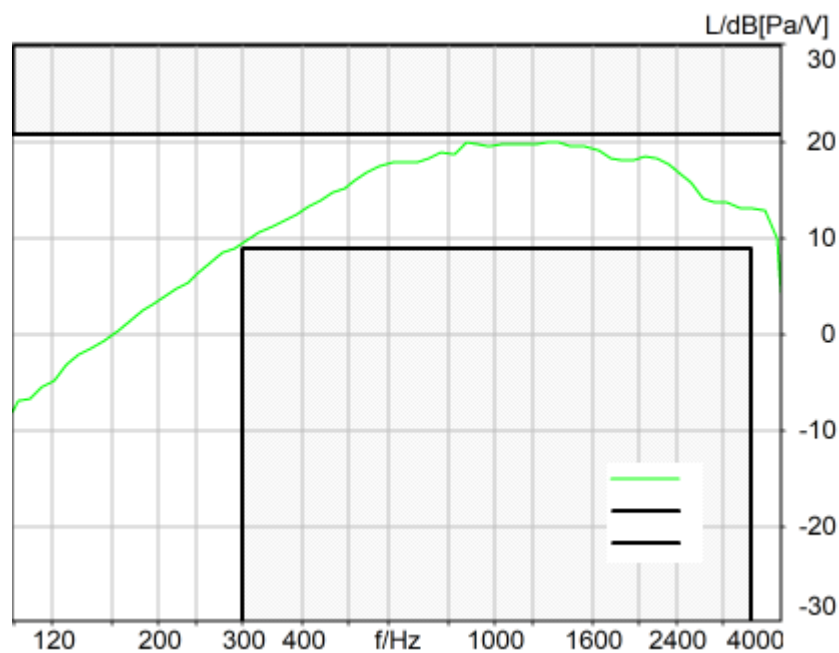
2	500Hz	32.06 dB
3	630Hz	32.82 dB
4	800Hz	30.35 dB
5	1000Hz	30.12 dB
6	1250Hz	23.46 dB
7	1600Hz	23.57 dB
8	2000Hz	21.58 dB
9	2500Hz	29.42 dB
10	3150Hz	32.47 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.58dB at 2000Hz.

2024/4/2 13:18 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



Absolute minimal distance
0.91 dB at 873.9 Hz Ok

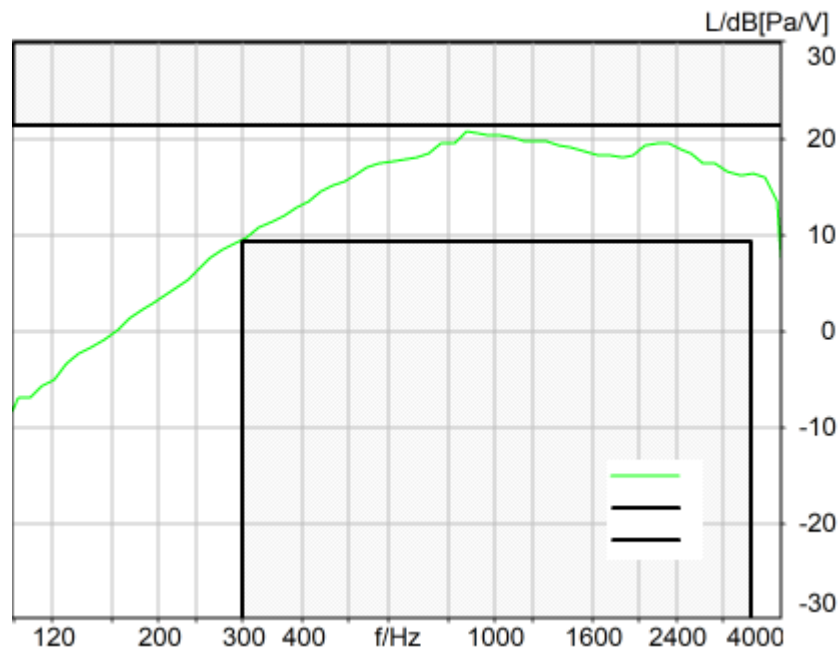
Ok

2024/4/2 12:54 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



Absolute minimal distance

0.49 dB at 873.9 Hz Ok

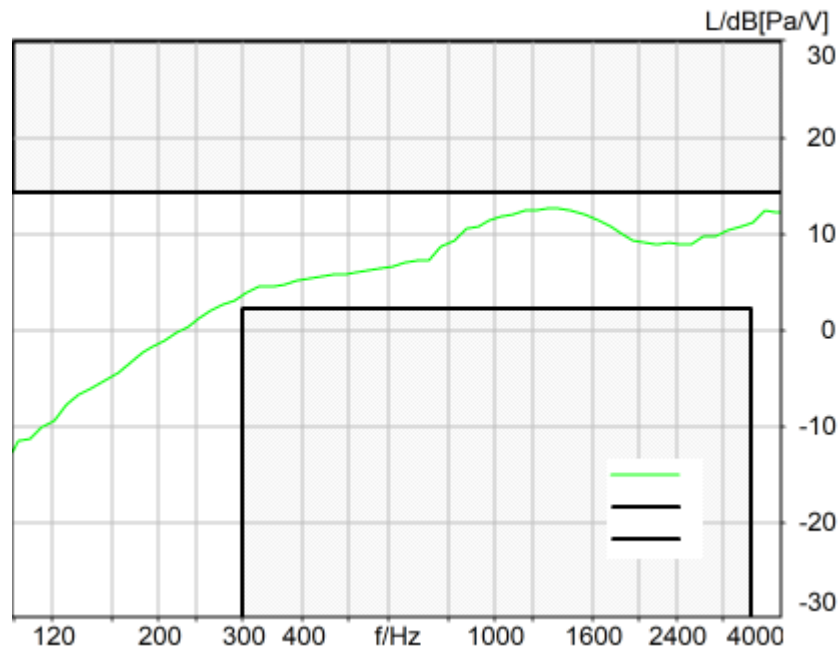
Ok

2024/4/2 12:55 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



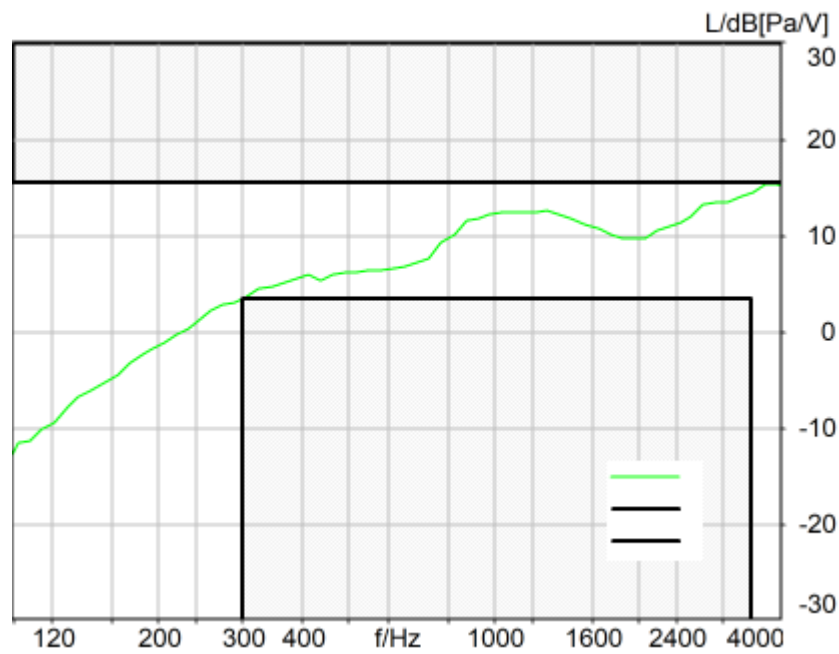
Absolute minimal distance
1.58 dB at 1285.9 Hz Ok

Ok

2024/4/2 13:19 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.11 dB at 305.9 Hz Ok

Ok

2024/4/2 13:19 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

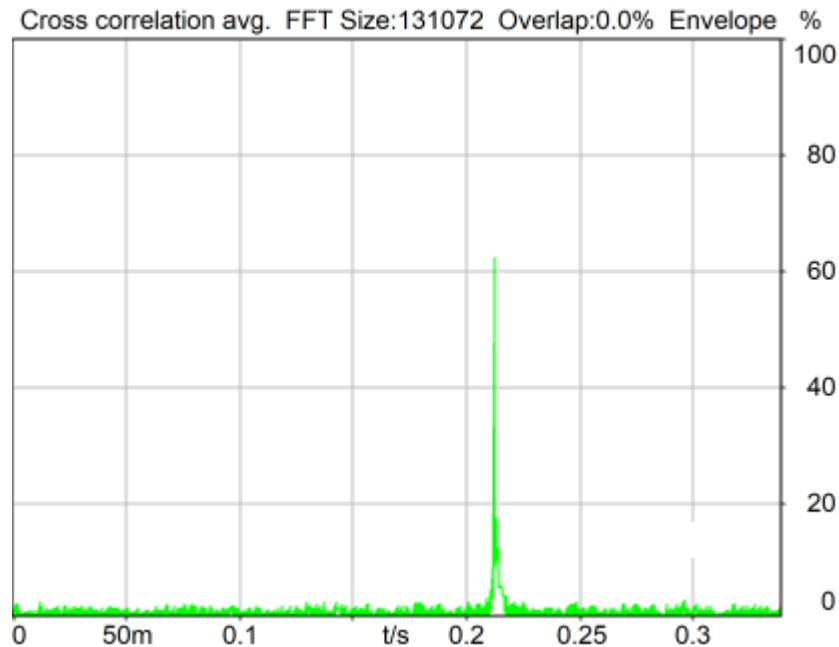
Measurement Object	WIFI 5.2G_802.11a 6M_EVS WB 128kbps_CH40
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/27 12:08
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



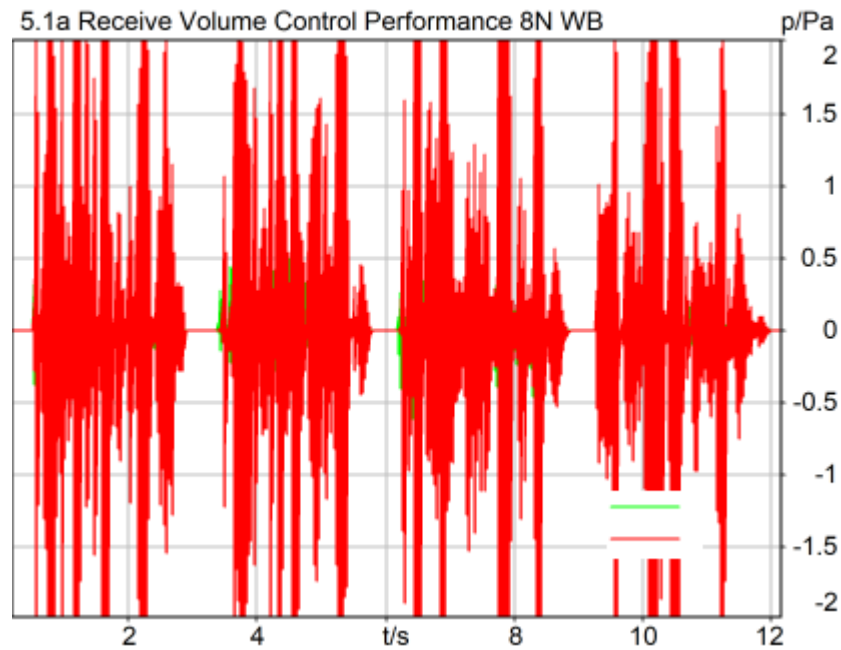
Delay (Cross): 213.2 ms

2024/4/2 12:57 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 86.14 dB[SPL], Act.: 84.62%

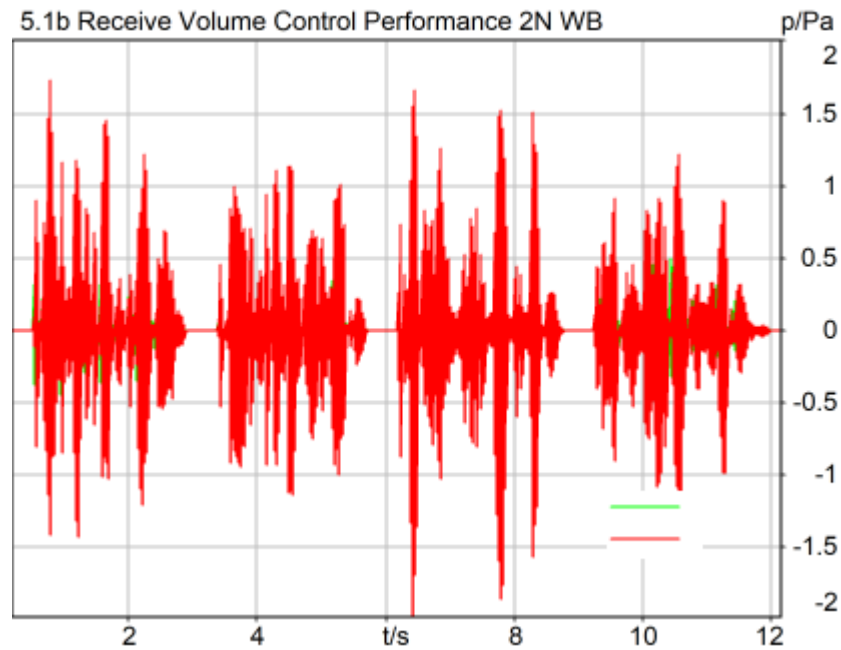
Corrected Speech Level: 16.14 dB[SPL] Ok

Ok

2024/4/2 12:58 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 78.88 dB[SPL], Act.: 84.77%

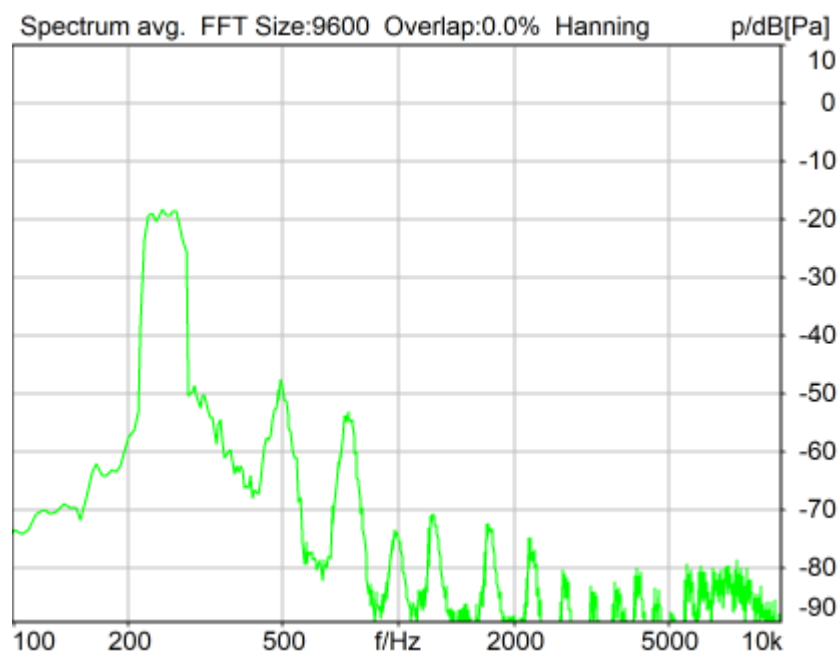
Corrected Speech Level: 8.88 dB[SPL] Ok

Ok

2024/4/2 13:06 ACQUA 5.1.200

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): 31.42 dB (2.68%) Ok

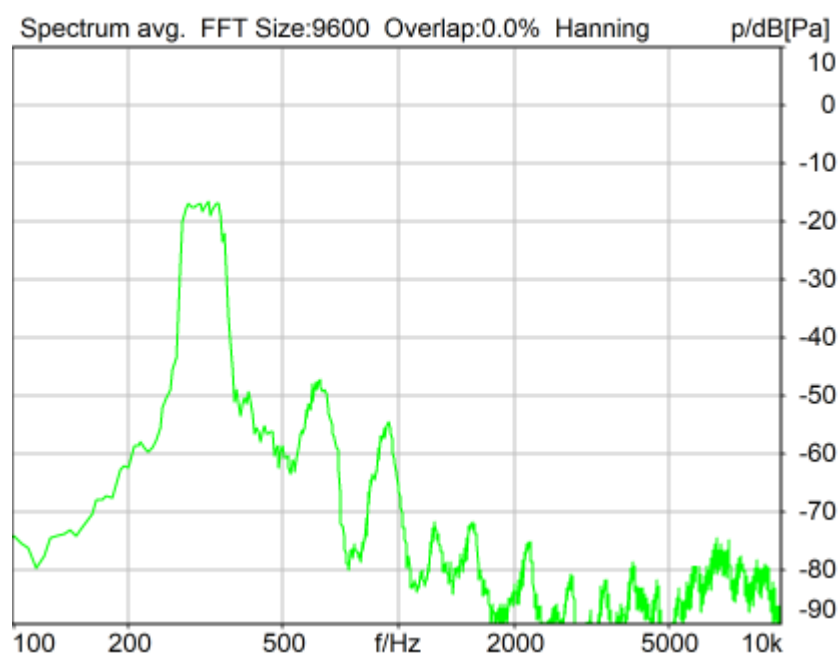
Ok

2024/4/2 12:58 ACQUA 5.1.200

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): 30.78 dB (2.89%) Ok

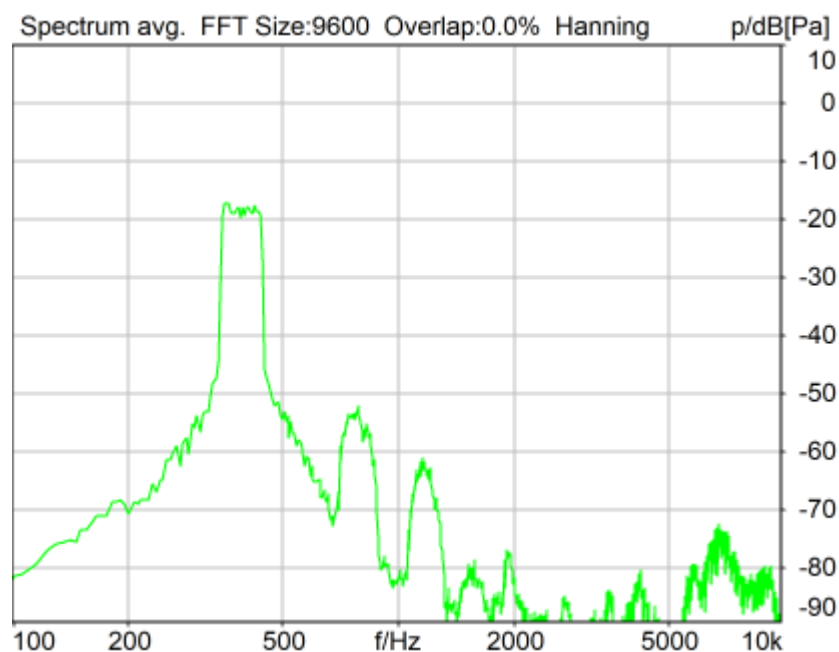
Ok

2024/4/2 12:58 ACQUA 5.1.200

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): 33.29 dB (2.17%) Ok

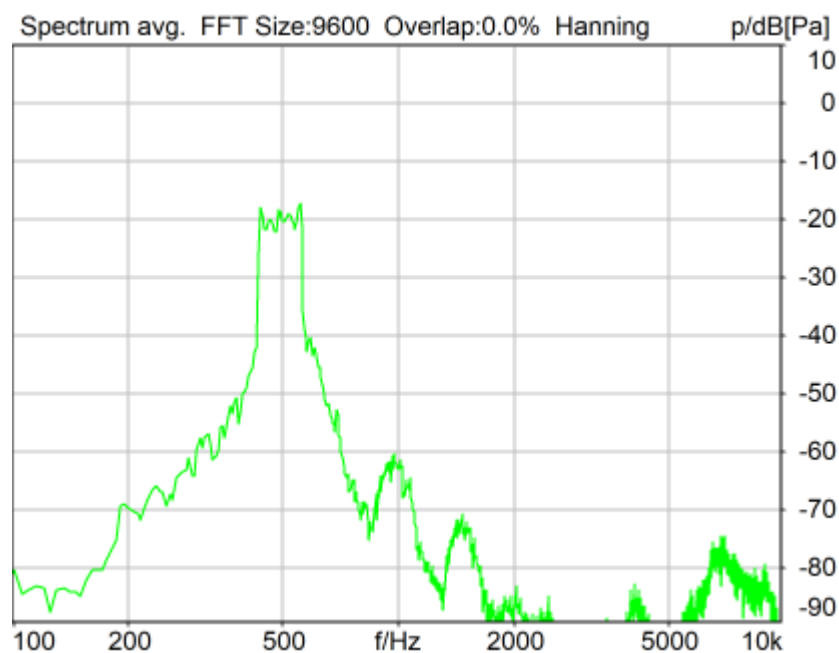
Ok

2024/4/2 12:59 ACQUA 5.1.200

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): 29.89 dB (3.20%) Ok

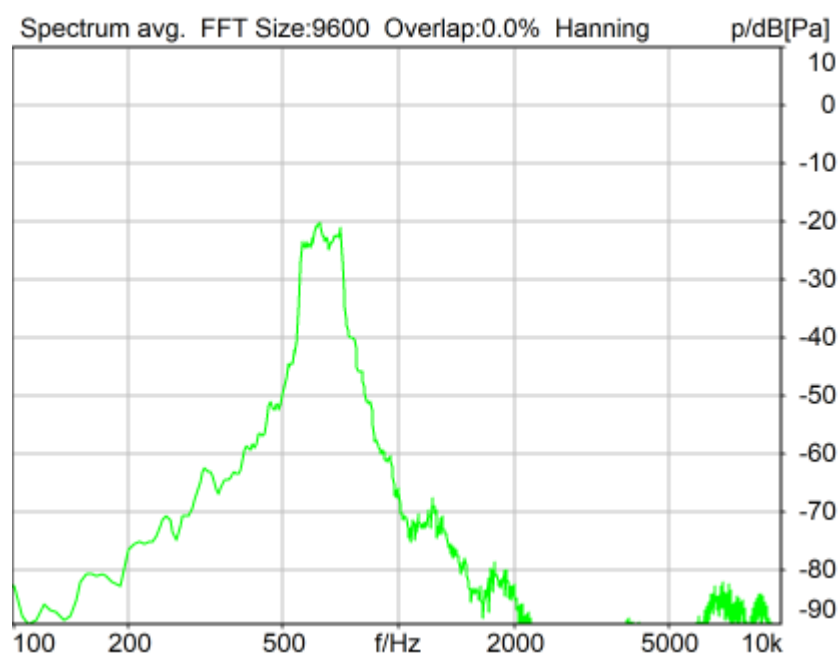
Ok

2024/4/2 12:59 ACQUA 5.1.200

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): 23.75 dB (6.49%) Ok

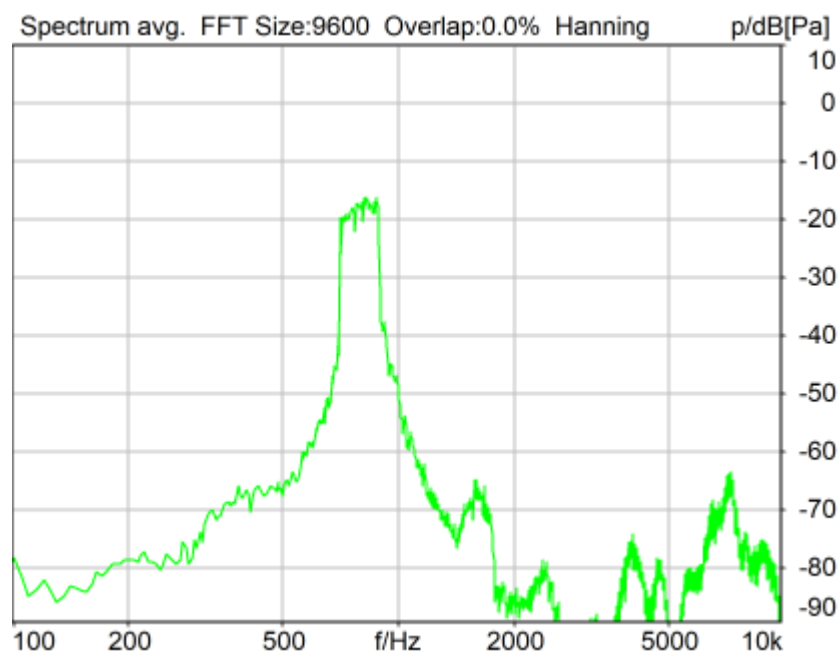
Ok

2024/4/2 13:00 ACQUA 5.1.200

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): 30.07 dB (3.14%) Ok

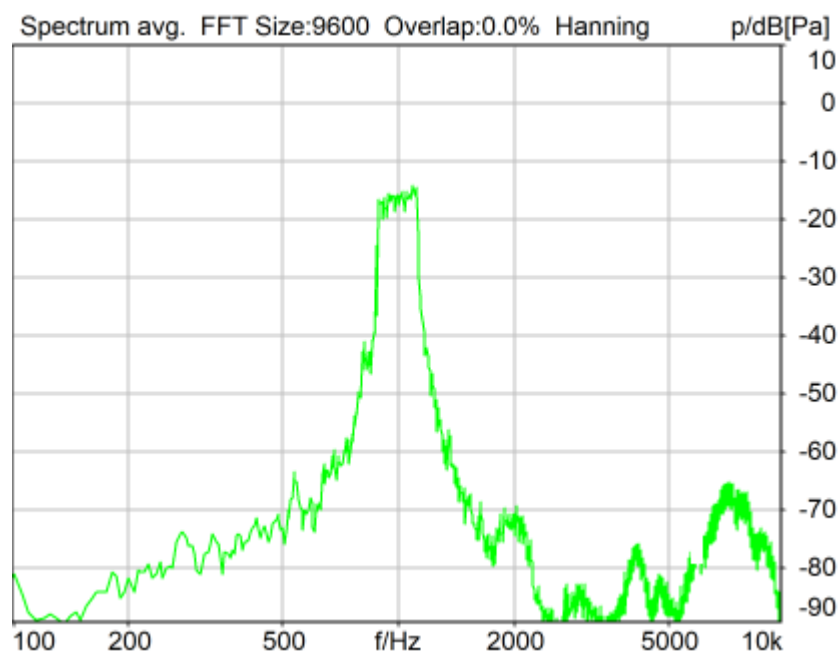
Ok

2024/4/2 13:00 ACQUA 5.1.200

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

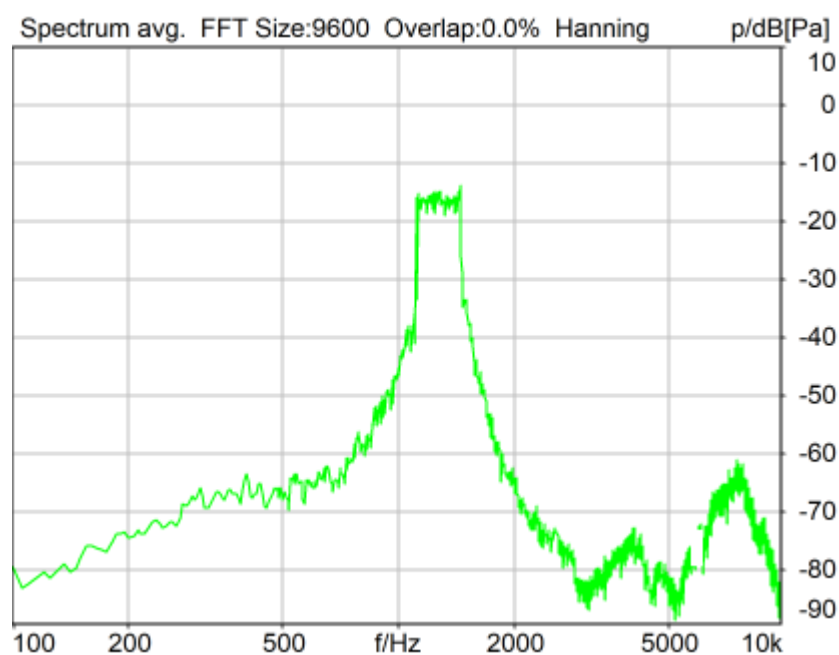
Ok

2024/4/2 13:00 ACQUA 5.1.200

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): 20.68 dB (9.25%) Ok

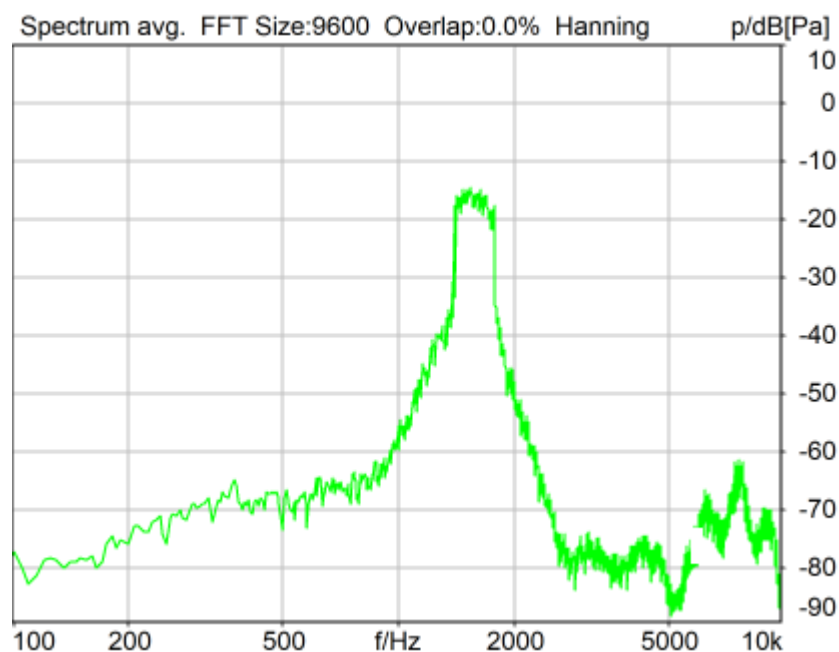
Ok

2024/4/2 13:01 ACQUA 5.1.200

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): 23.51 dB (6.68%) Ok

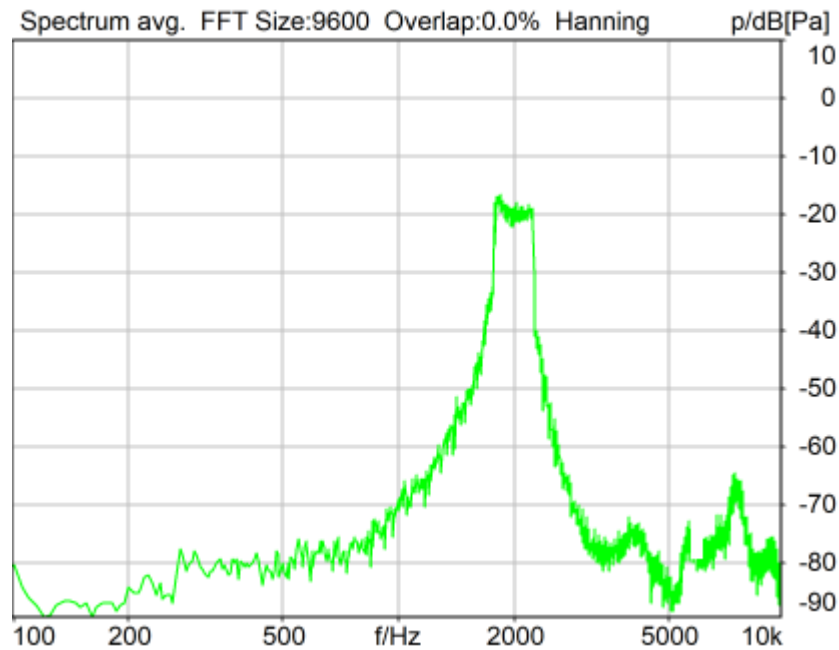
Ok

2024/4/2 13:01 ACQUA 5.1.200

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): 22.21 dB (7.75%) Ok

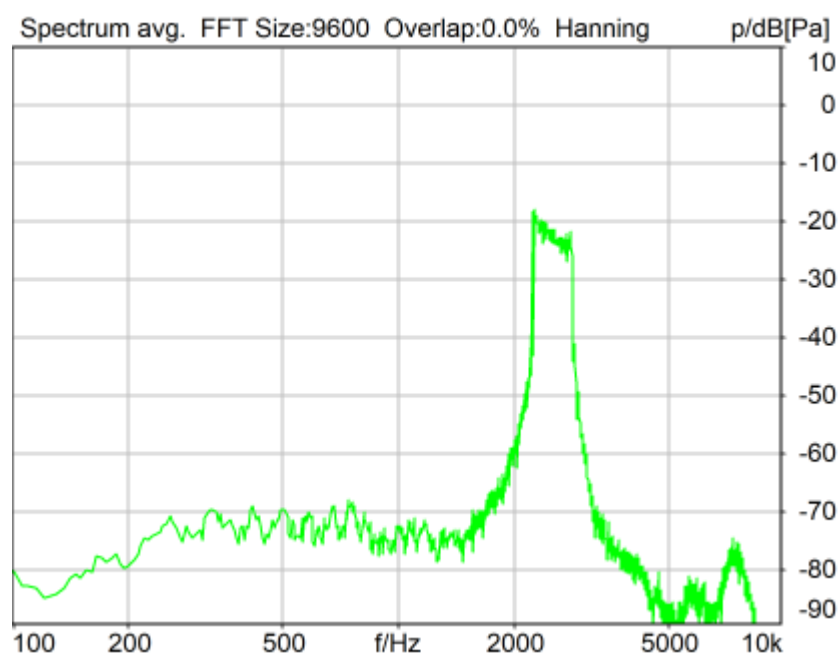
Ok

2024/4/2 13:02 ACQUA 5.1.200

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): 29.12 dB (3.50%) Ok

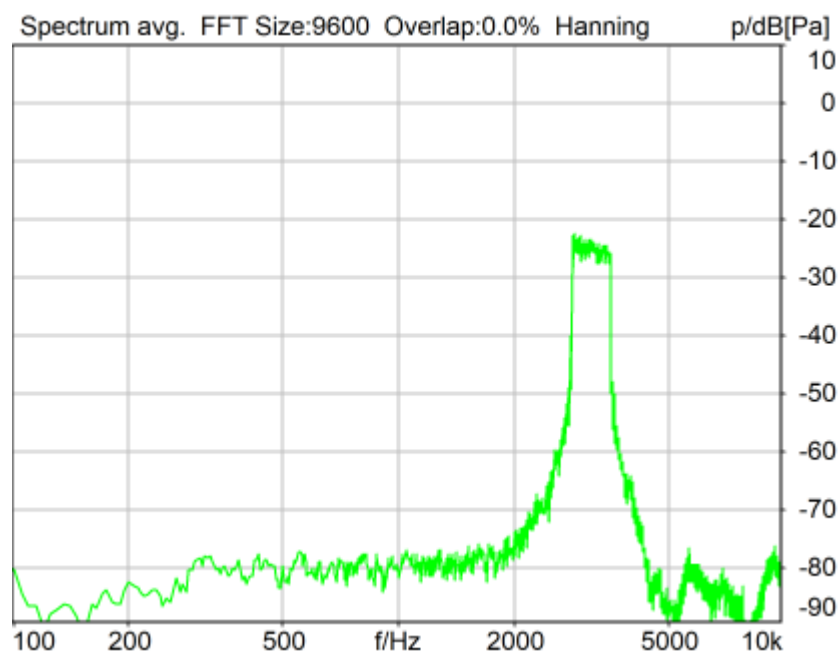
Ok

2024/4/2 13:02 ACQUA 5.1.200

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): 31.27 dB (2.73%) Ok

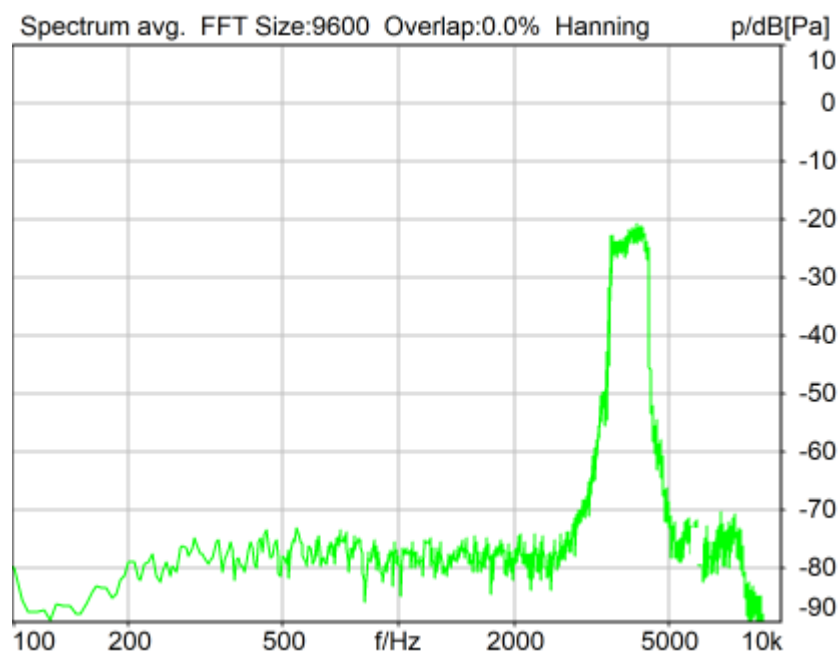
Ok

2024/4/2 13:02 ACQUA 5.1.200

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): 29.25 dB (3.45%) Ok

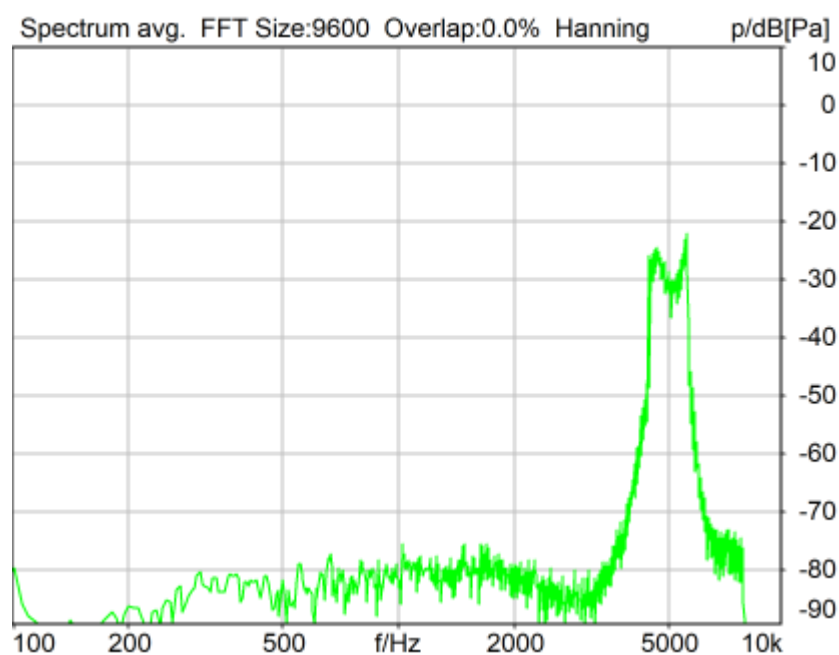
Ok

2024/4/2 13:03 ACQUA 5.1.200

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): 27.24 dB (4.35%) Ok

Ok

2024/4/2 13:03 ACQUA 5.1.200

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	31.42 dB
2	315Hz	30.78 dB
3	400Hz	33.29 dB
4	500Hz	29.89 dB
5	630Hz	23.75 dB
6	800Hz	30.07 dB
7	1000Hz	29.30 dB
8	1250Hz	20.68 dB
9	1600Hz	23.51 dB
10	2000Hz	22.21 dB
11	2500Hz	29.12 dB
12	3150Hz	31.27 dB
13	4000Hz	29.25 dB
14	5000Hz	27.24 dB

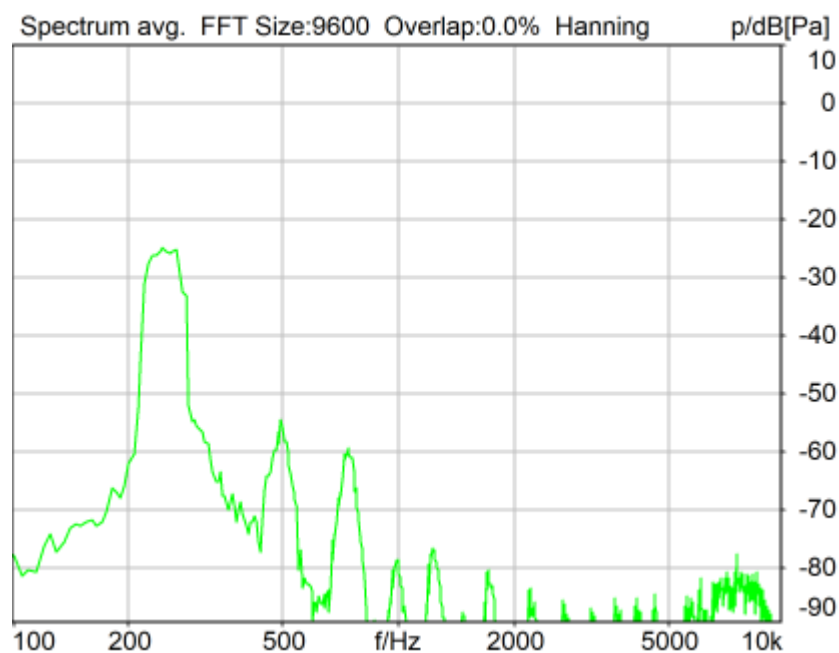
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 20.68dB at 1250Hz.

2024/4/2 13:03 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): 30.96 dB (2.83%) Ok

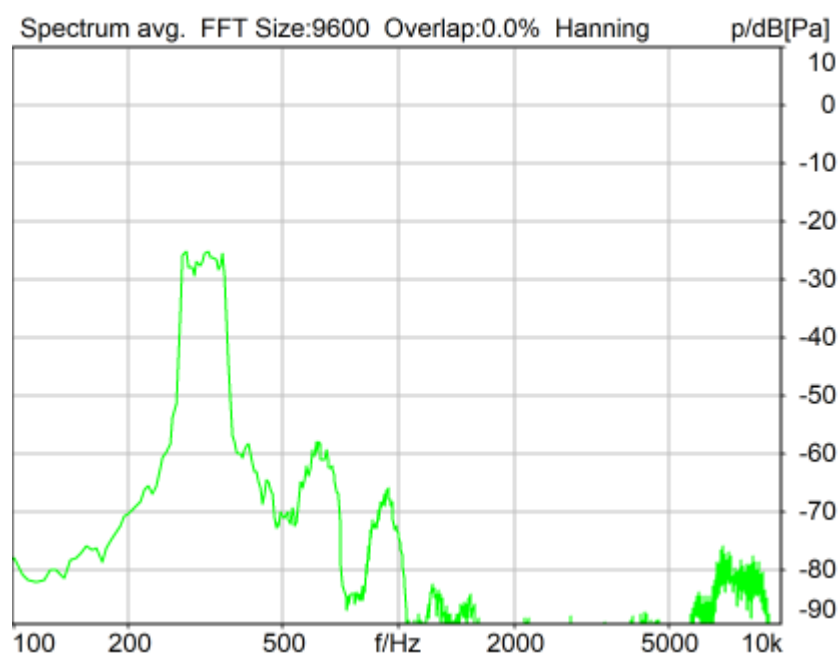
Ok

2024/4/2 13:06 ACQUA 5.1.200

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): 31.69 dB (2.60%) Ok

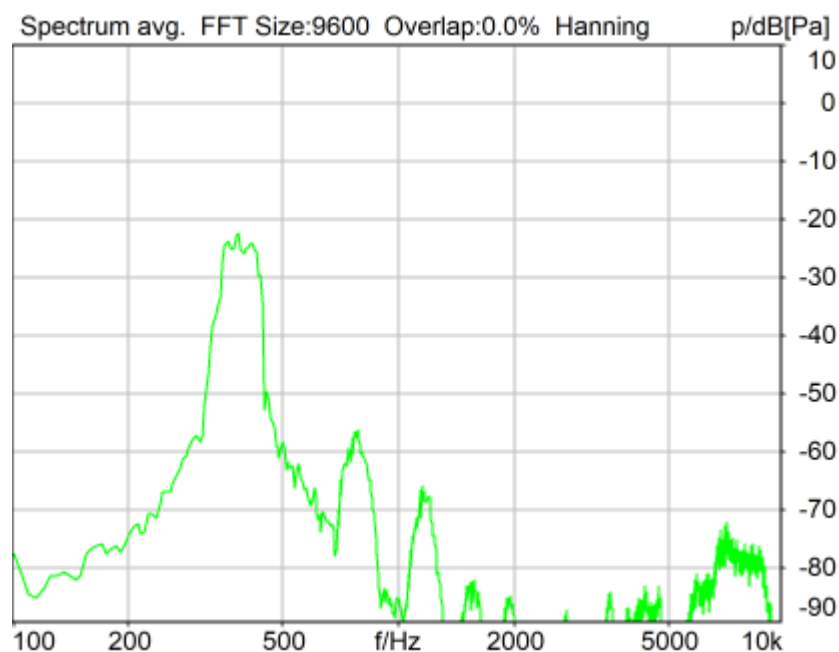
Ok

2024/4/2 13:07 ACQUA 5.1.200

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): 31.49 dB (2.66%) Ok

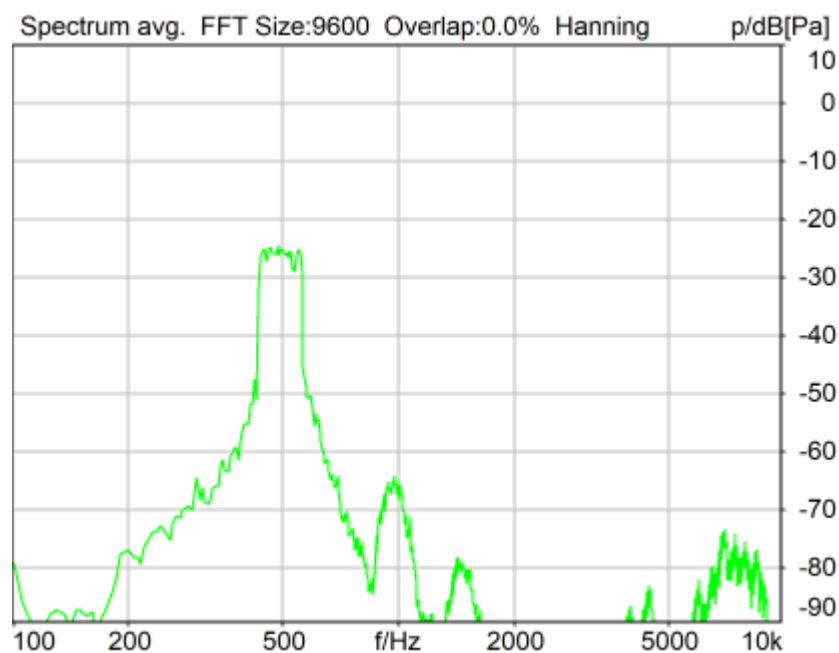
Ok

2024/4/2 13:07 ACQUA 5.1.200

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): 32.32 dB (2.42%) Ok

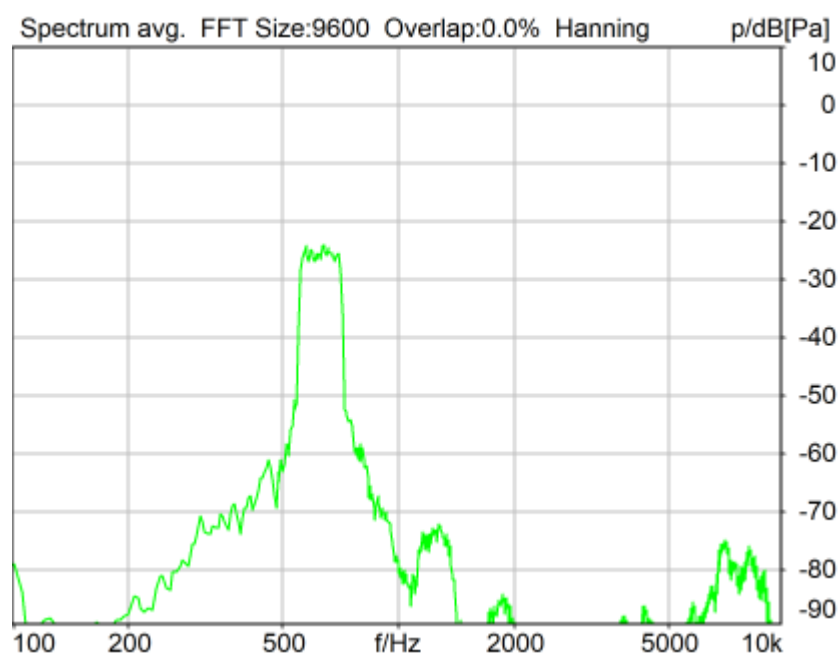
Ok

2024/4/2 13:07 ACQUA 5.1.200

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): 34.08 dB (1.98%) Ok

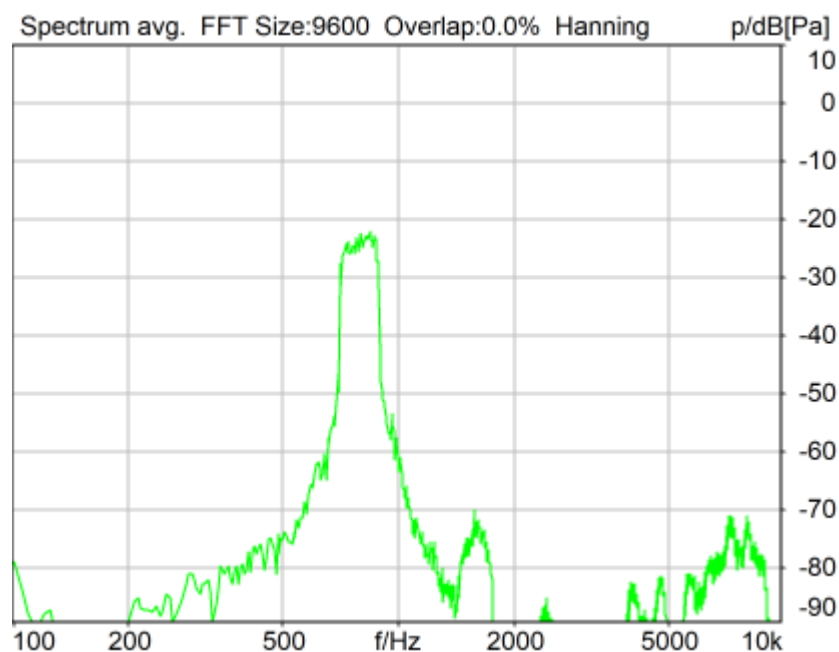
Ok

2024/4/2 13:08 ACQUA 5.1.200

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): 33.81 dB (2.04%) Ok

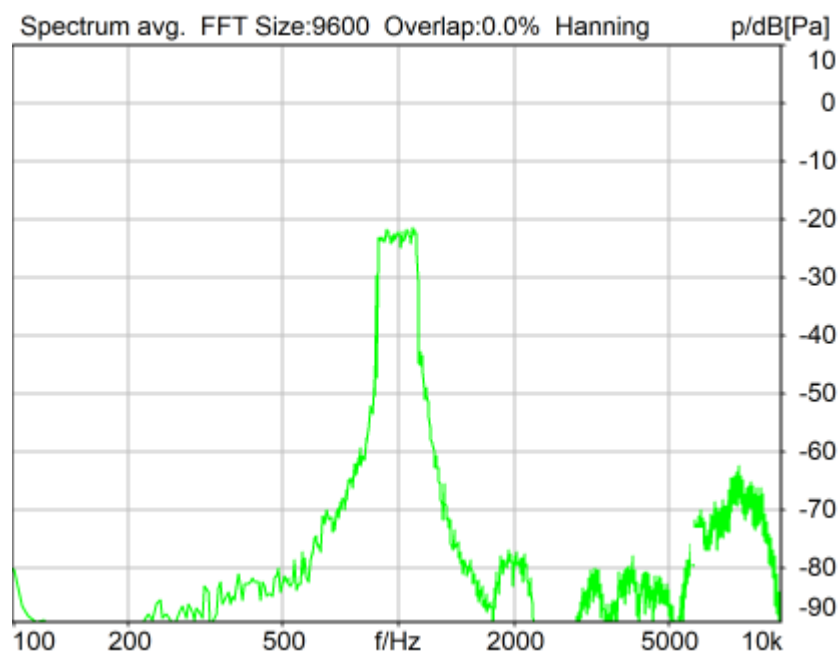
Ok

2024/4/2 13:08 ACQUA 5.1.200

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): 30.86 dB (2.86%) Ok

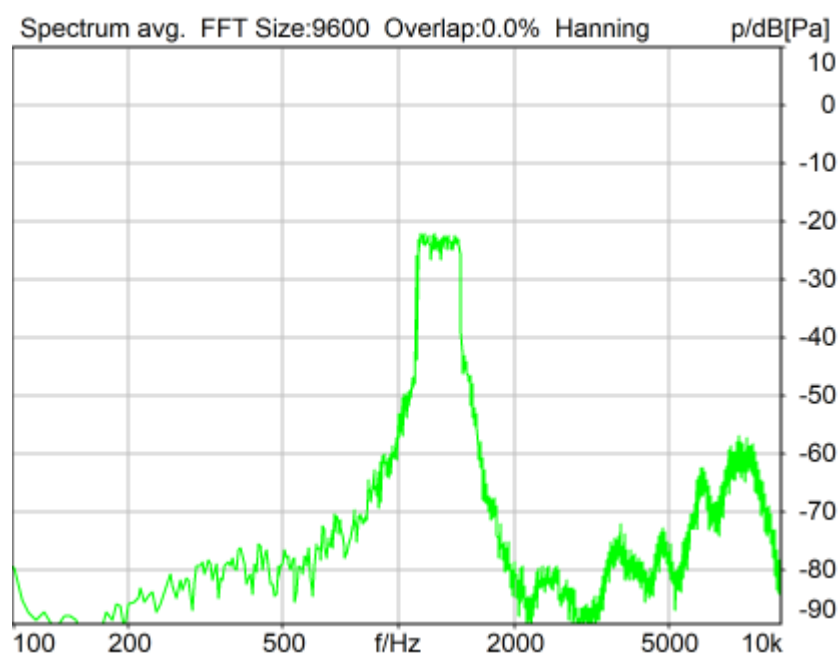
Ok

2024/4/2 13:09 ACQUA 5.1.200

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): 23.85 dB (6.42%) Ok

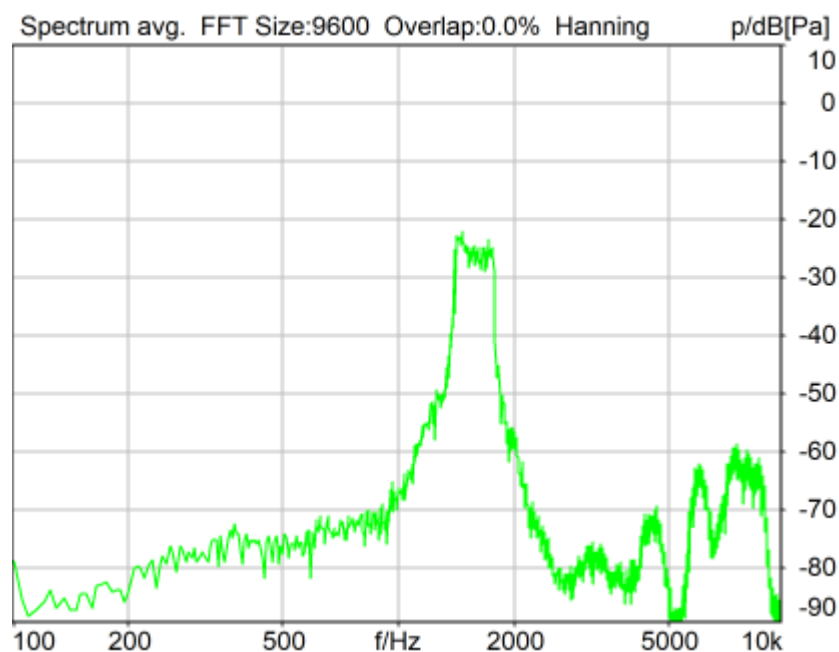
Ok

2024/4/2 13:09 ACQUA 5.1.200

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): 23.26 dB (6.87%) Ok

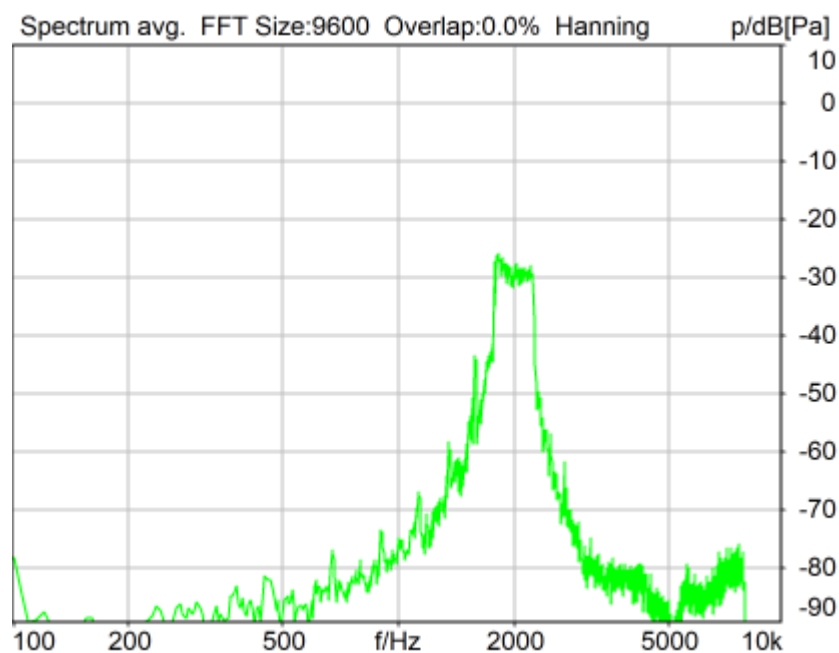
Ok

2024/4/2 13:09 ACQUA 5.1.200

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): 20.48 dB (9.46%) Ok

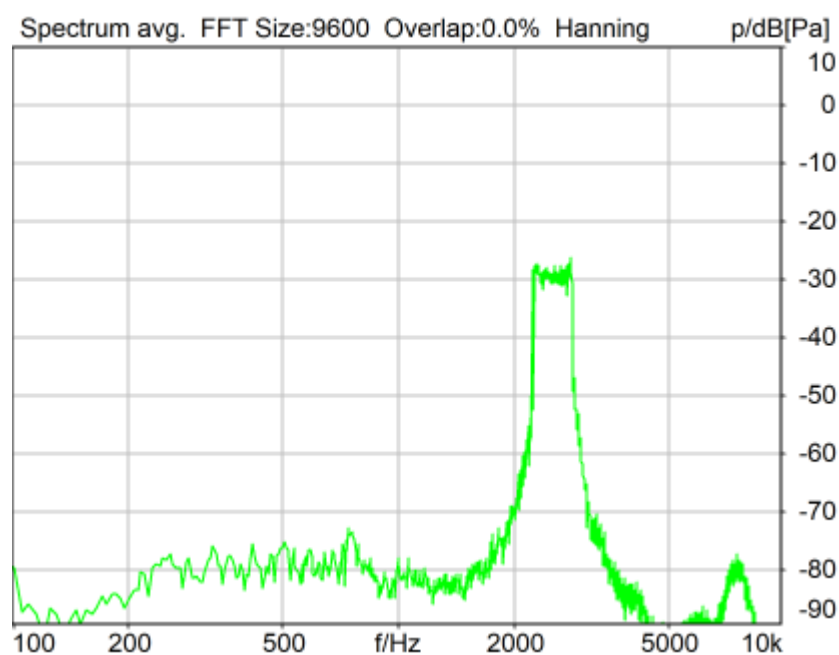
Ok

2024/4/2 13:10 ACQUA 5.1.200

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

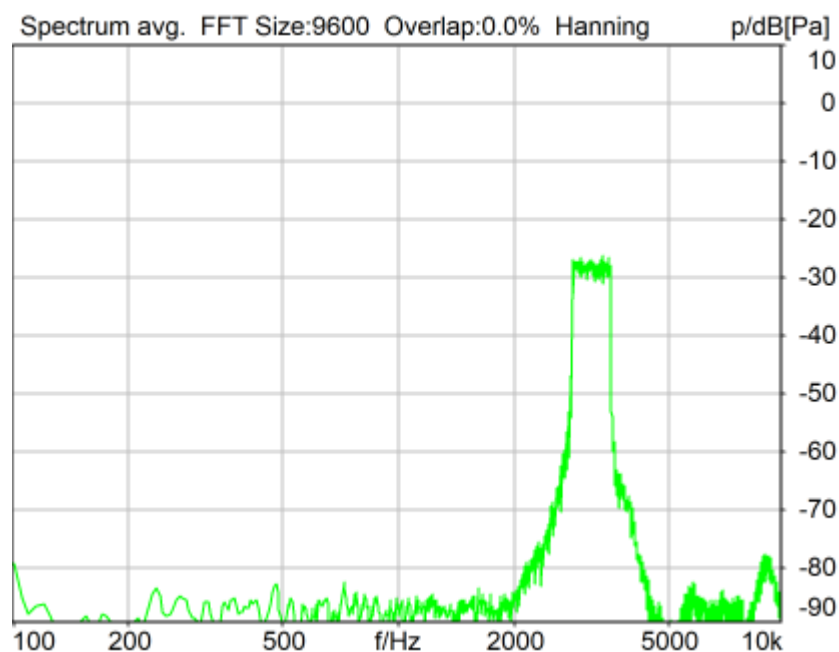
Ok

2024/4/2 13:10 ACQUA 5.1.200

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): 33.63 dB (2.08%) Ok

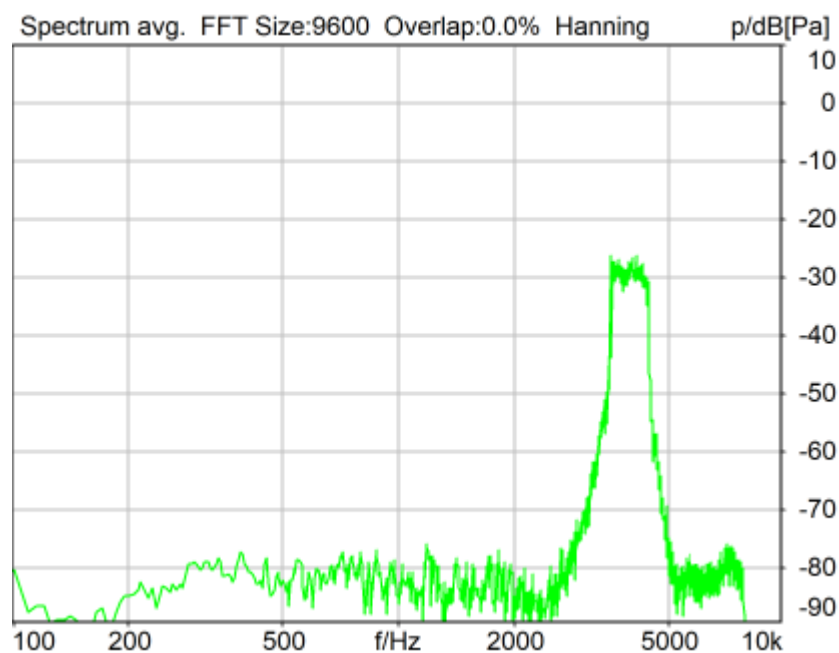
Ok

2024/4/2 13:11 ACQUA 5.1.200

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): 27.16 dB (4.38%) Ok

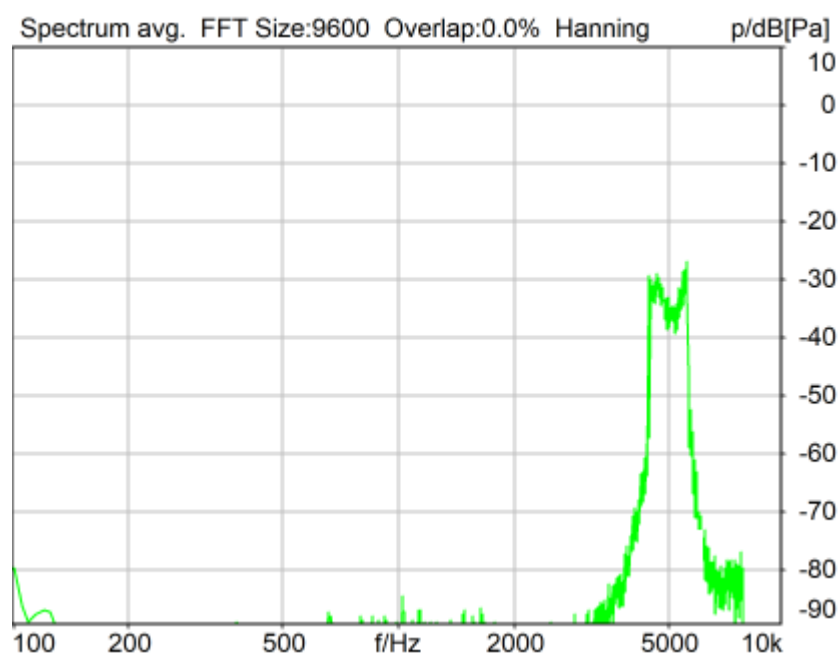
Ok

2024/4/2 13:11 ACQUA 5.1.200

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): 30.46 dB (3.00%) Ok

Ok

2024/4/2 13:11 ACQUA 5.1.200

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	30.96 dB
2	315Hz	31.69 dB
3	400Hz	31.49 dB
4	500Hz	32.32 dB
5	630Hz	34.08 dB
6	800Hz	33.81 dB
7	1000Hz	30.86 dB
8	1250Hz	23.85 dB
9	1600Hz	23.26 dB
10	2000Hz	20.48 dB
11	2500Hz	28.42 dB
12	3150Hz	33.63 dB
13	4000Hz	27.16 dB
14	5000Hz	30.46 dB

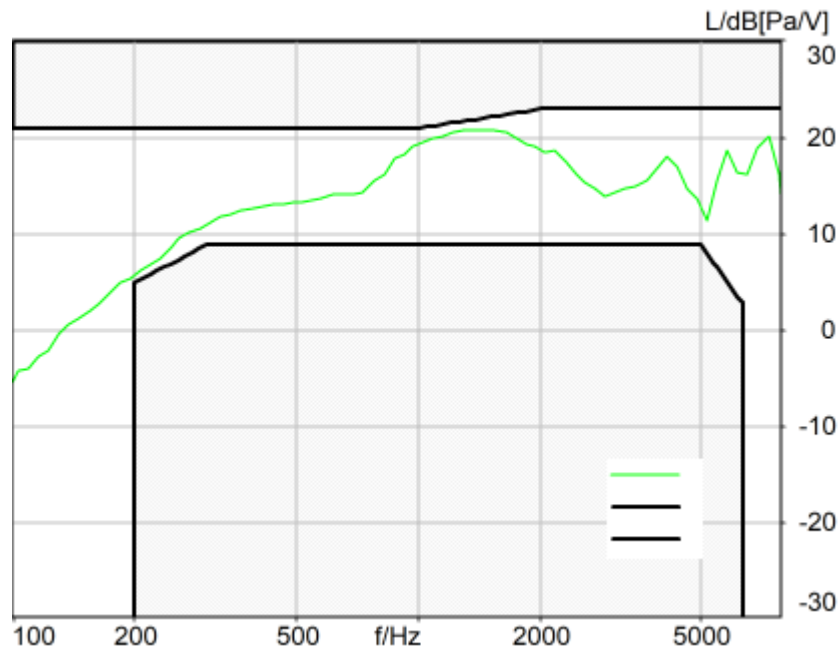
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 20.48dB at 2000Hz.

2024/4/2 13:11 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



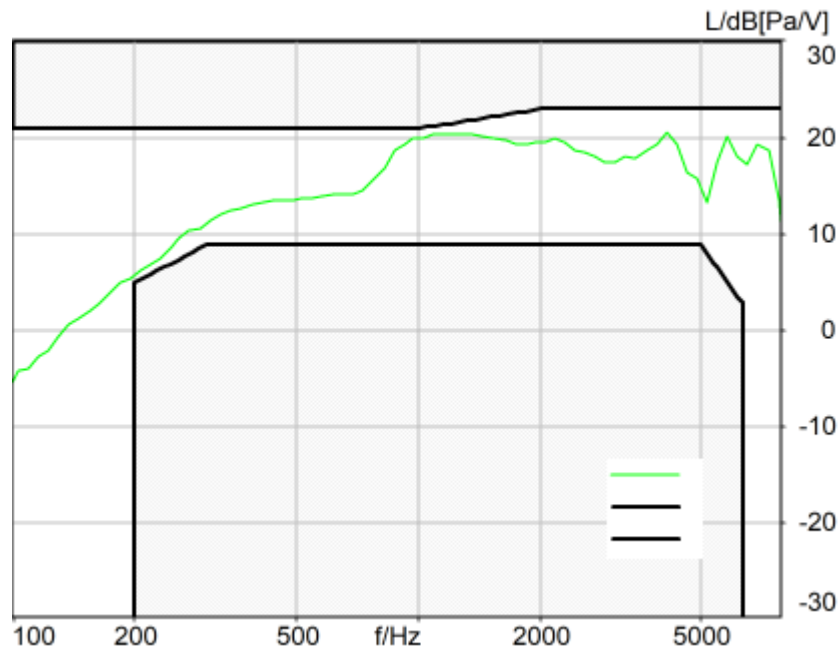
Absolute minimal distance
0.94 dB at 1285.9 Hz Ok

Ok

2024/4/2 13:04 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



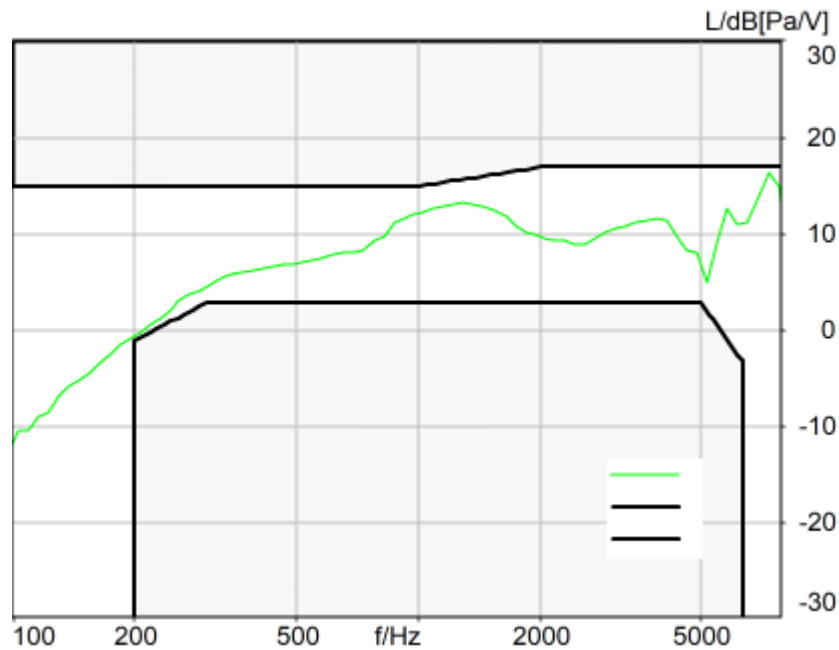
Absolute minimal distance
0.94 dB at 1088.7 Hz Ok

Ok

2024/4/2 13:04 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



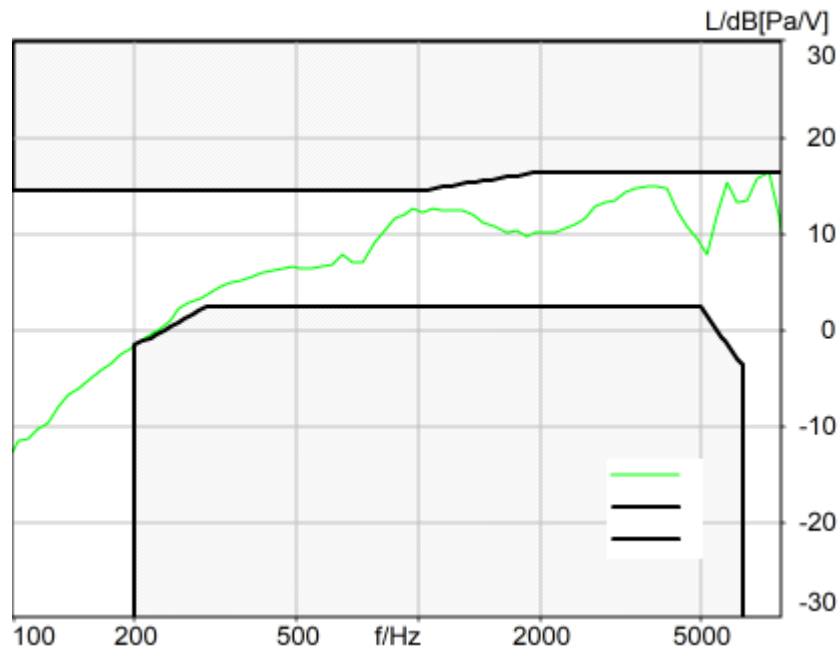
Absolute minimal distance
0.58 dB at 7315.0 Hz Ok

Ok

2024/4/18 17:25 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
0.15 dB at 7315.0 Hz Ok

Ok

2024/4/2 13:12 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

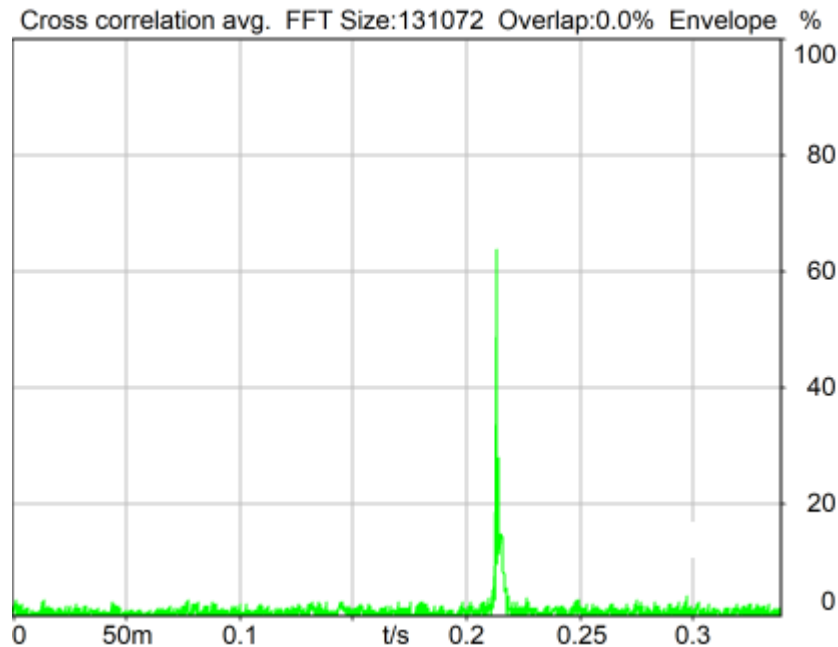
Measurement Object	WIFI 5.3G_802.11a 6M_EVS NB 24.4kbps_CH60
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:17
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



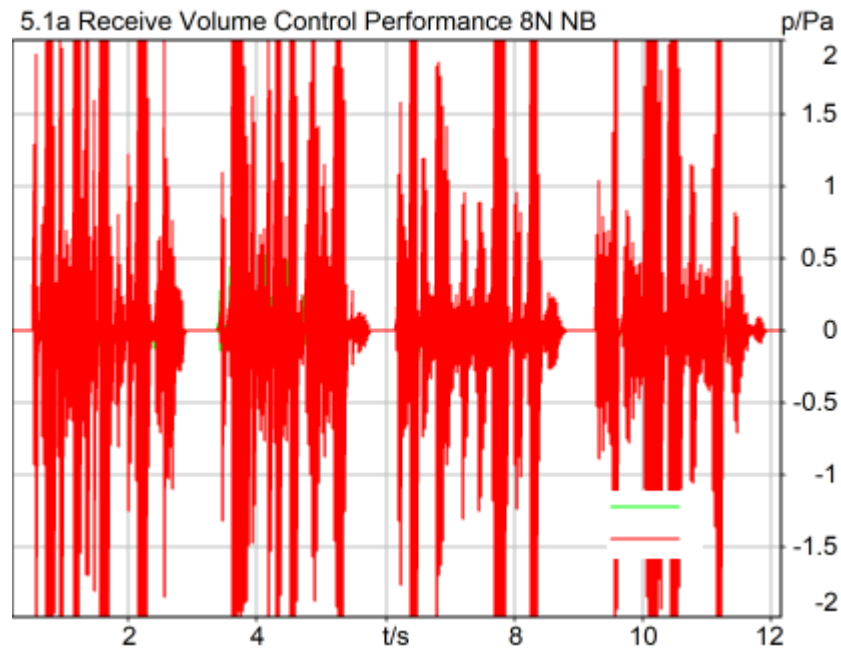
Delay (Cross): 214.4 ms

2024/4/2 13:41 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

Speech Level RCV: 87.26 dB[SPL], Act.: 80.38%

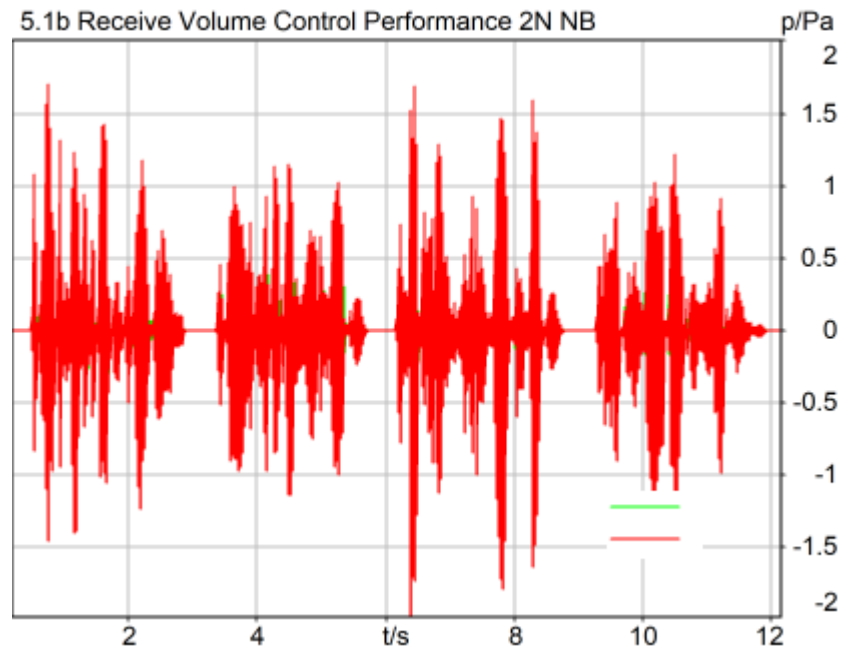
Corrected Speech Level: 17.26 dB[SPL] Ok

Ok

2024/4/2 13:43 ACQUA 5.1.200

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

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



Correction

X - 70

Speech Level RCV: 78.82 dB[SPL], Act.: 83.74%

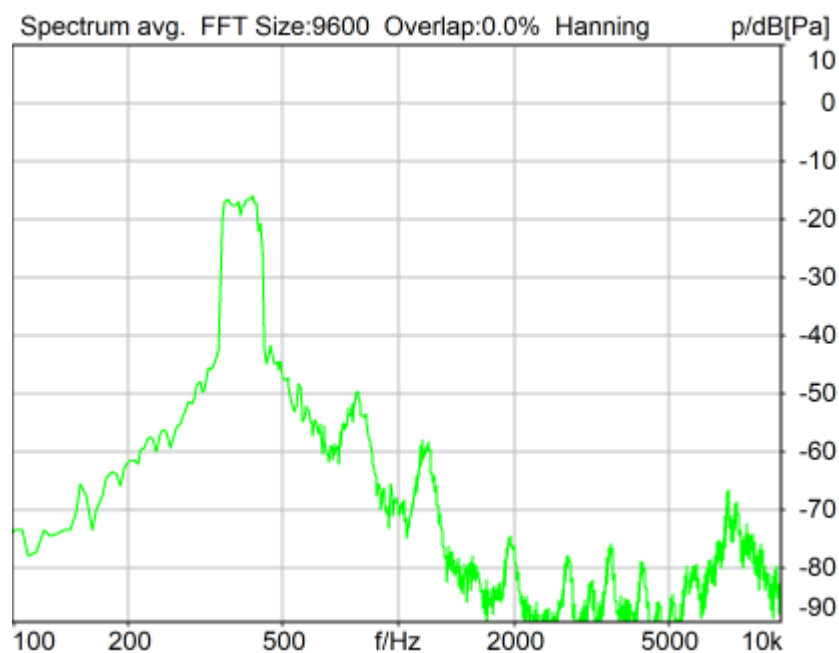
Corrected Speech Level: 8.82 dB[SPL] Ok

Ok

2024/4/2 14:09 ACQUA 5.1.200

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): 30.09 dB (3.13%) Ok

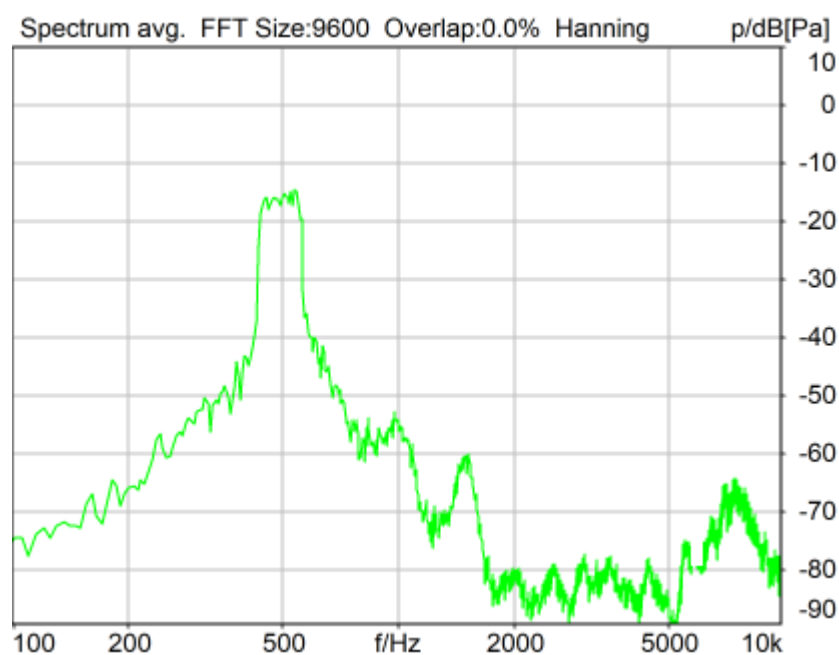
Ok

2024/4/2 13:44 ACQUA 5.1.200

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): 28.47 dB (3.77%) Ok

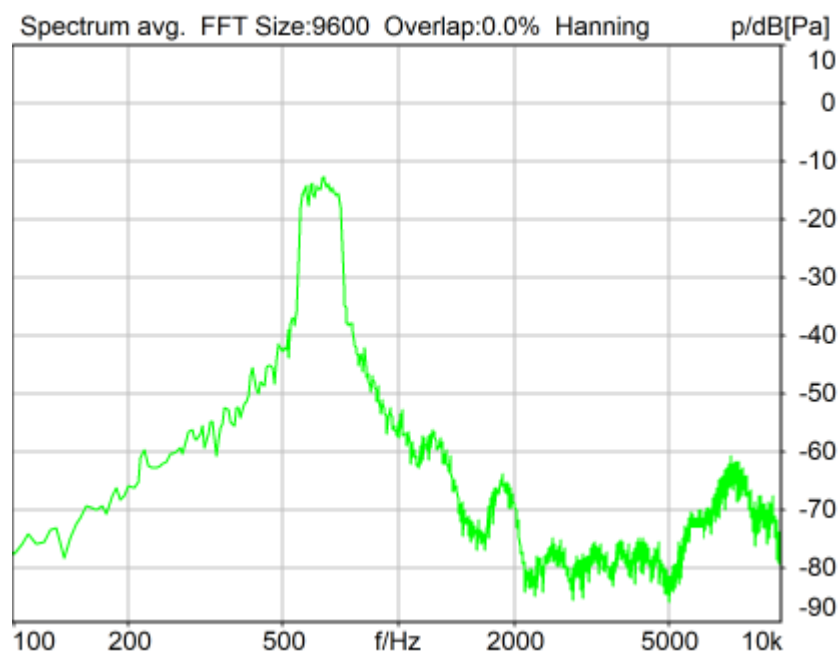
Ok

2024/4/2 13:44 ACQUA 5.1.200

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): 27.89 dB (4.03%) Ok

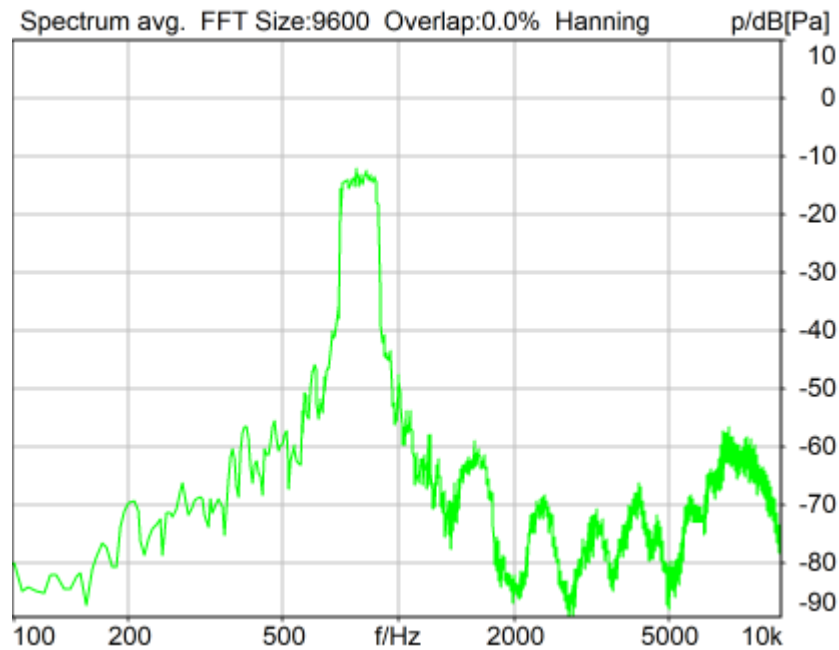
Ok

2024/4/2 13:45 ACQUA 5.1.200

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): 32.16 dB (2.47%) Ok

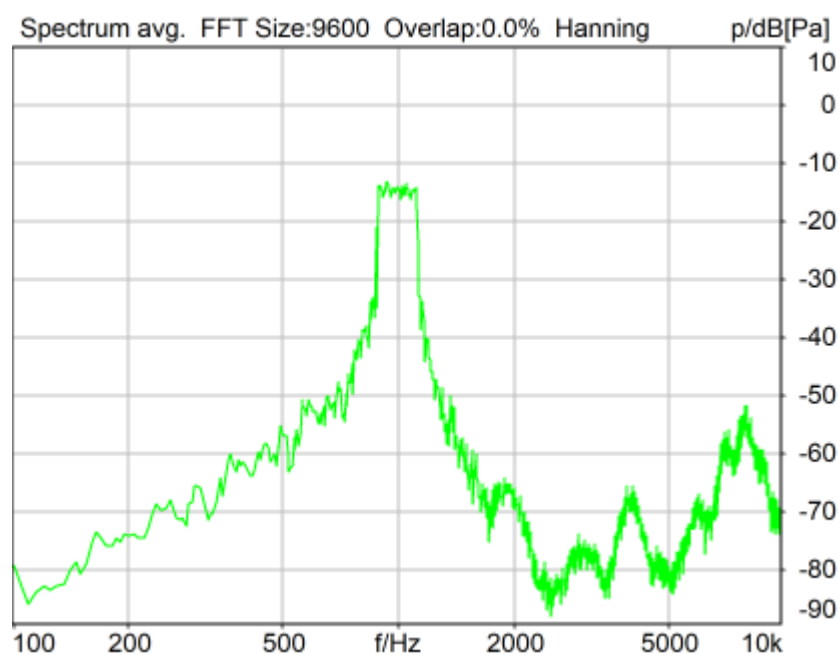
Ok

2024/4/2 13:45 ACQUA 5.1.200

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): 26.45 dB (4.76%) Ok

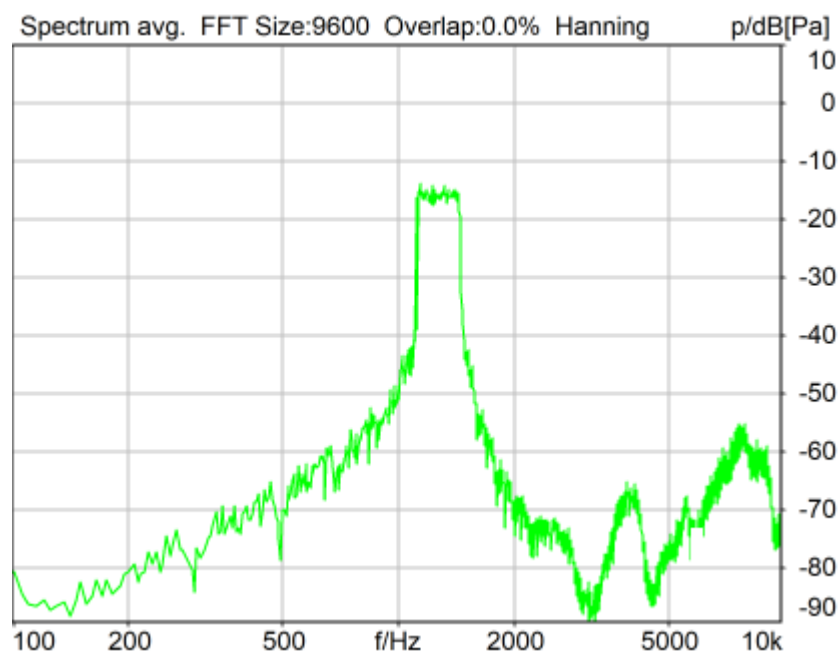
Ok

2024/4/2 13:45 ACQUA 5.1.200

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): 26.78 dB (4.58%) Ok

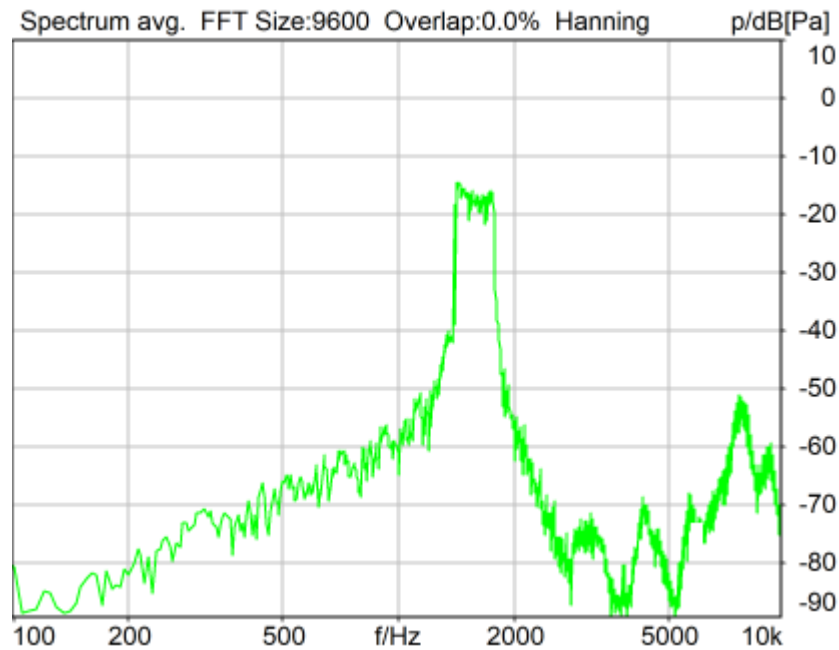
Ok

2024/4/2 13:46 ACQUA 5.1.200

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): 27.38 dB (4.28%) Ok

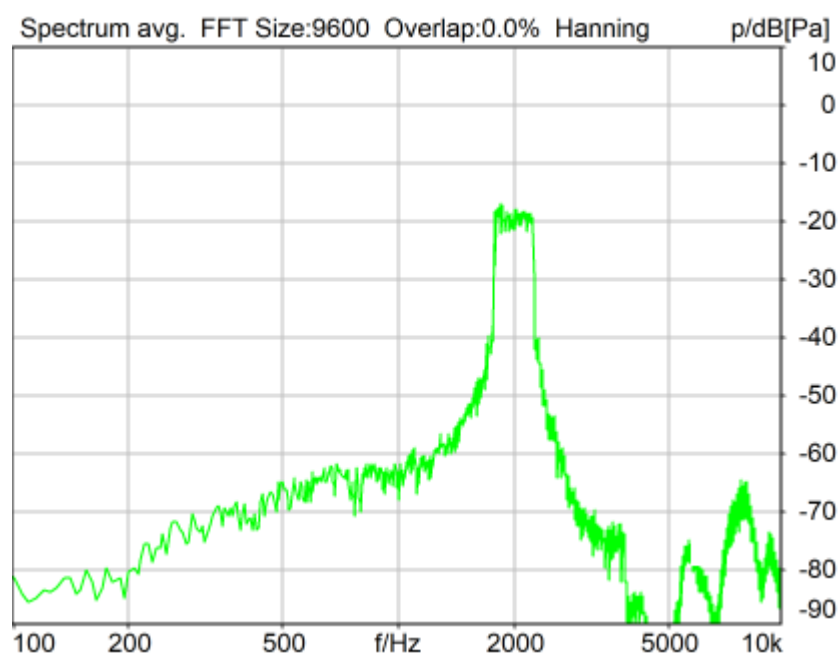
Ok

2024/4/2 13:46 ACQUA 5.1.200

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): 25.68 dB (5.20%) Ok

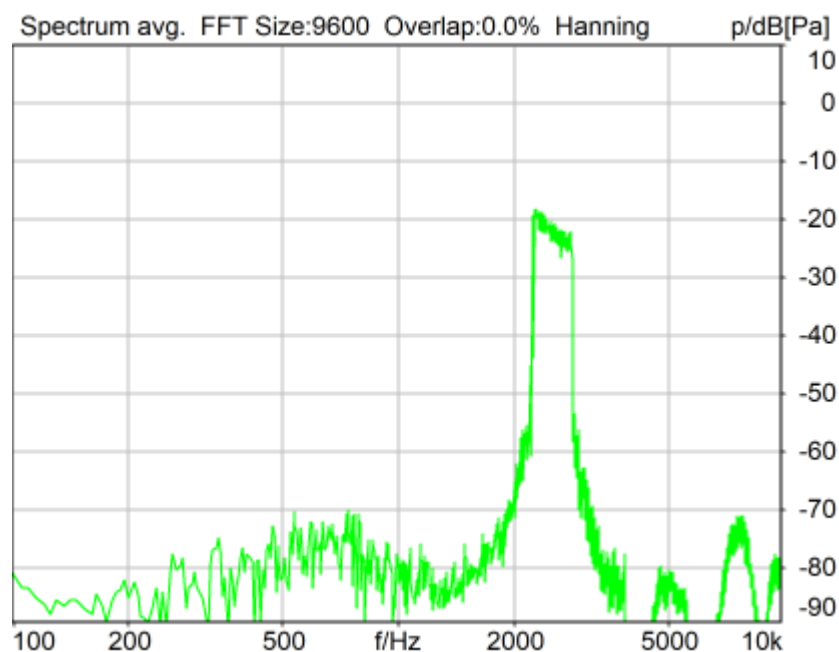
Ok

2024/4/2 13:47 ACQUA 5.1.200

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): 38.39 dB (1.20%) Ok

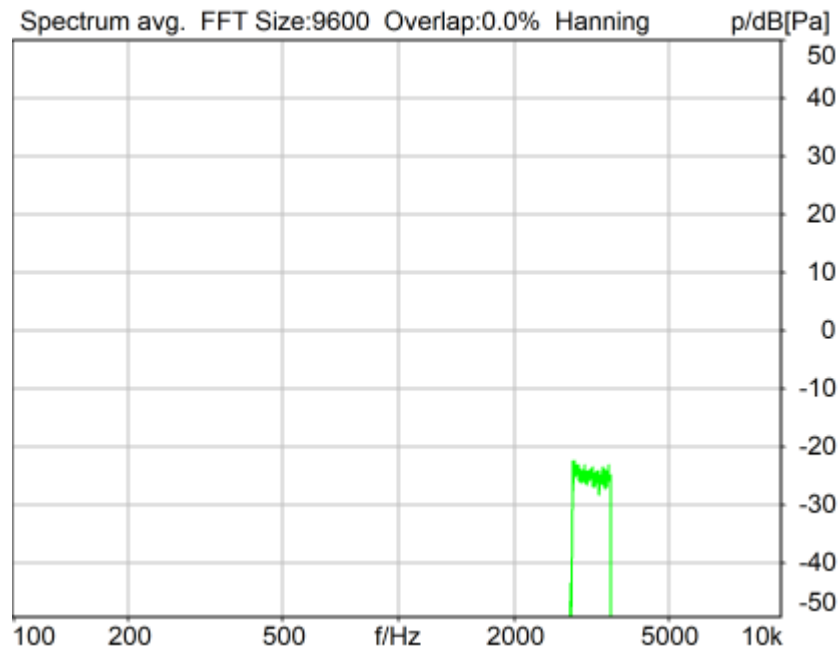
Ok

2024/4/2 13:47 ACQUA 5.1.200

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): 42.30 dB (0.77%) Ok

Ok

2024/4/2 13:47 ACQUA 5.1.200

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

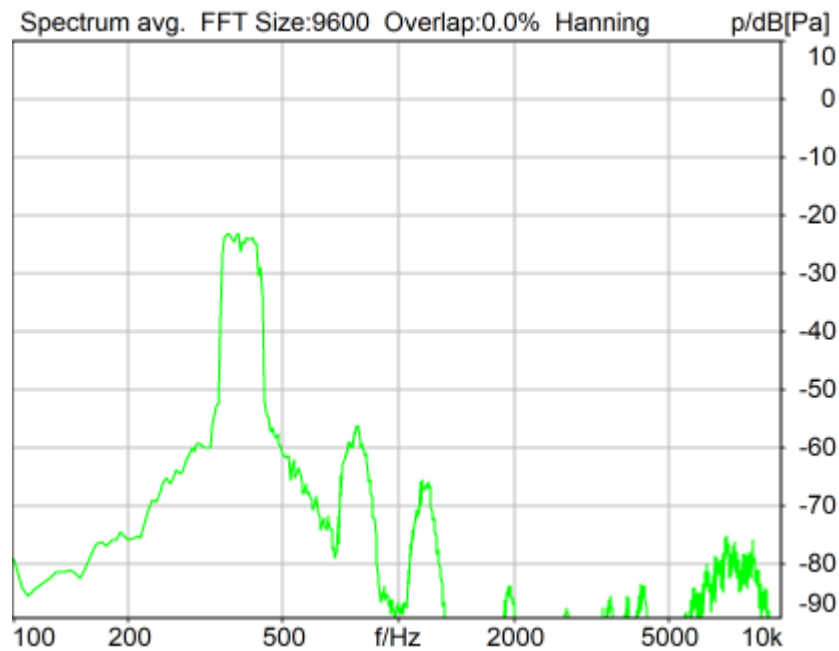
Region	Frequency	SDNR
1	400Hz	30.09 dB
2	500Hz	28.47 dB
3	630Hz	27.89 dB
4	800Hz	32.16 dB
5	1000Hz	26.45 dB
6	1250Hz	26.78 dB
7	1600Hz	27.38 dB
8	2000Hz	25.68 dB
9	2500Hz	38.39 dB
10	3150Hz	42.30 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 25.68dB at 2000Hz.

2024/4/2 13:48 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): 32.02 dB (2.51%) Ok

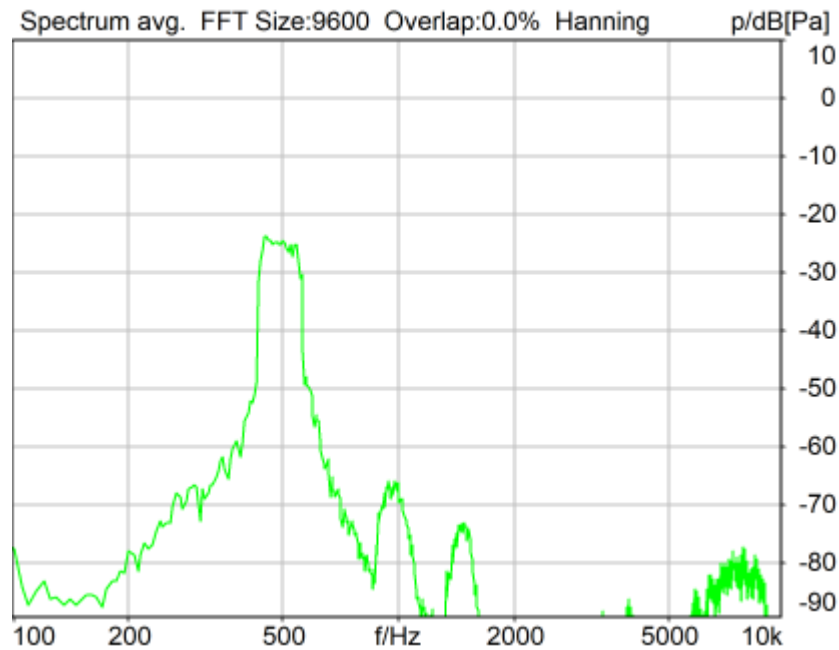
Ok

2024/4/2 14:09 ACQUA 5.1.200

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): 34.22 dB (1.94%) Ok

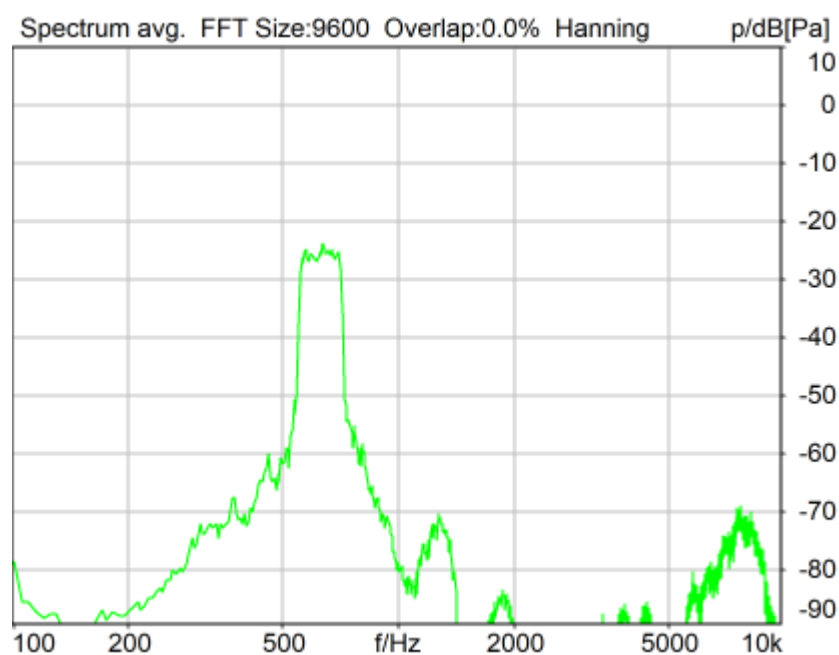
Ok

2024/4/2 14:10 ACQUA 5.1.200

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): 32.85 dB (2.28%) Ok

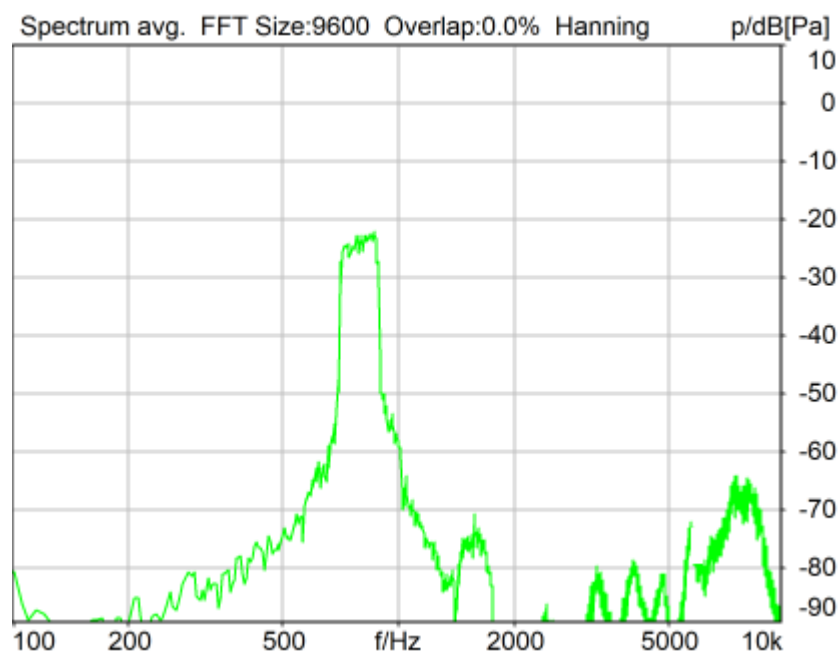
Ok

2024/4/2 14:10 ACQUA 5.1.200

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): 31.46 dB (2.67%) Ok

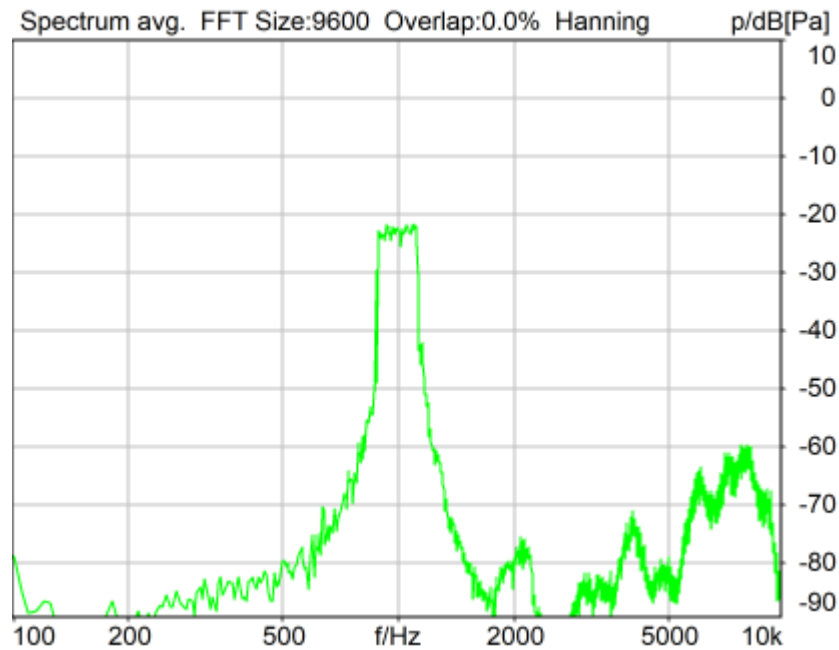
Ok

2024/4/2 14:10 ACQUA 5.1.200

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): 29.24 dB (3.45%) Ok

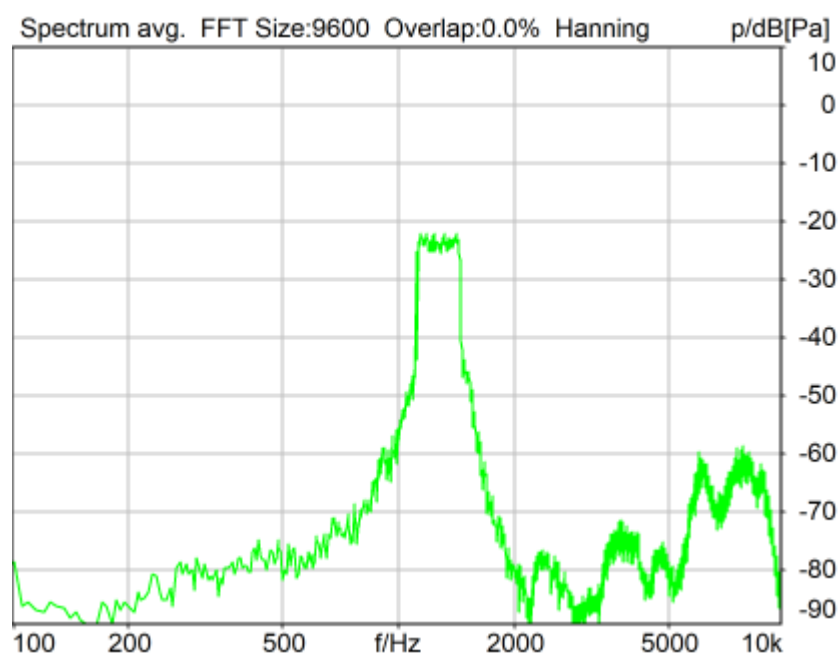
Ok

2024/4/2 14:11 ACQUA 5.1.200

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): 24.49 dB (5.96%) Ok

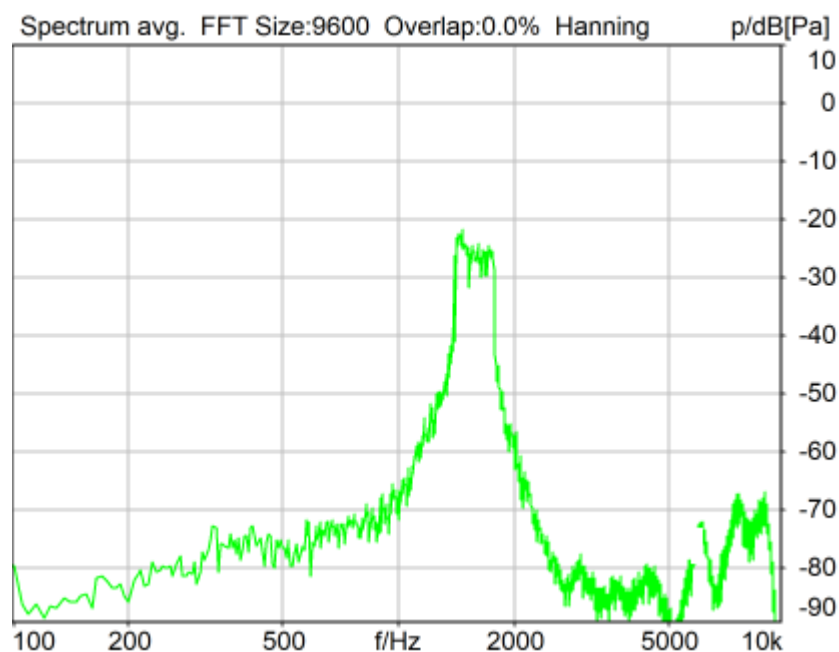
Ok

2024/4/2 14:11 ACQUA 5.1.200

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): 24.14 dB (6.21%) Ok

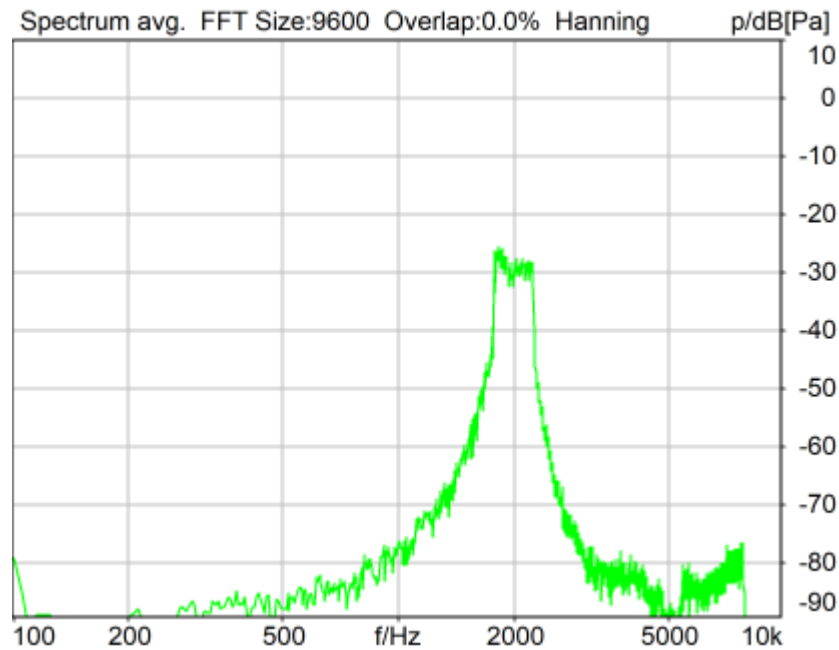
Ok

2024/4/2 14:12 ACQUA 5.1.200

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): 21.94 dB (8.00%) Ok

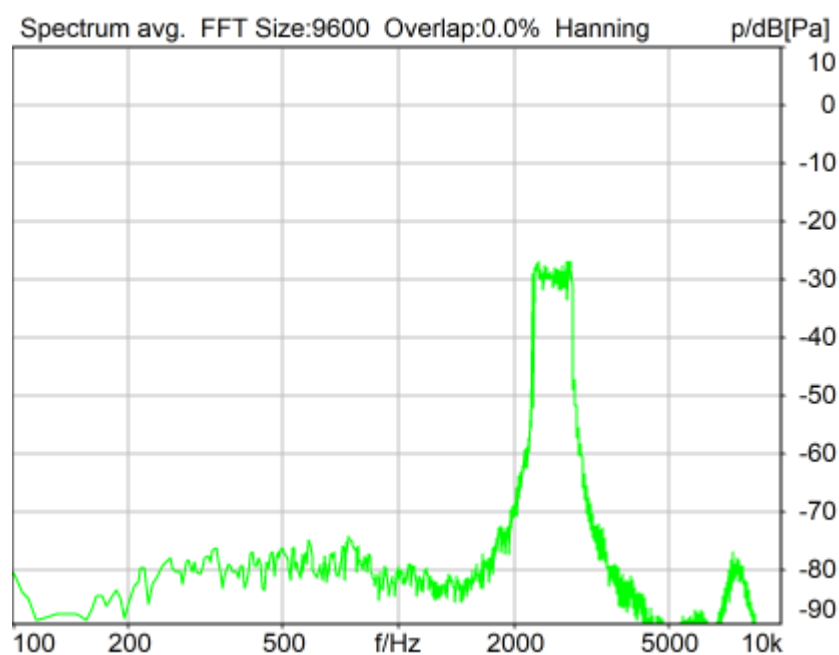
Ok

2024/4/2 14:12 ACQUA 5.1.200

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): 29.20 dB (3.47%) Ok

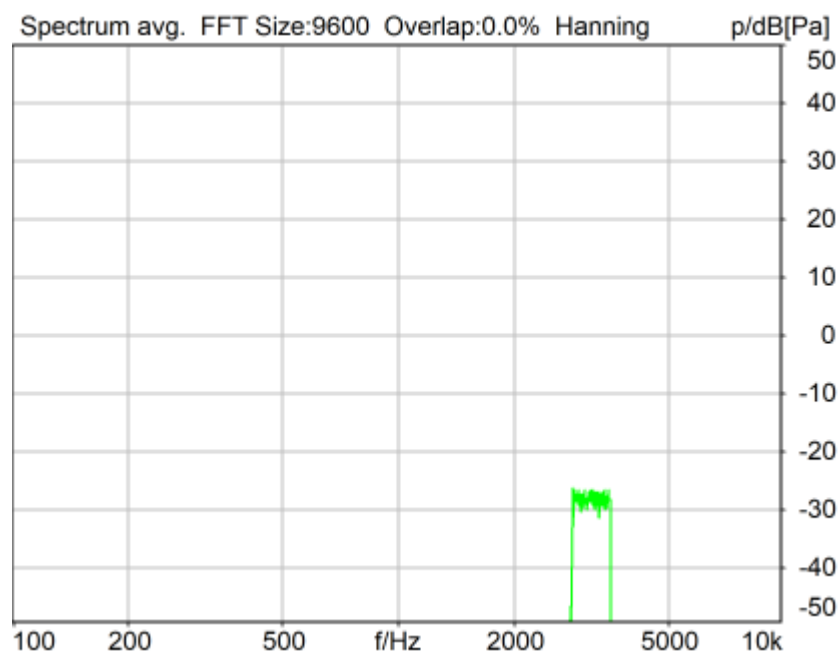
Ok

2024/4/2 14:13 ACQUA 5.1.200

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): 34.17 dB (1.96%) Ok

Ok

2024/4/2 14:13 ACQUA 5.1.200

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	32.02 dB

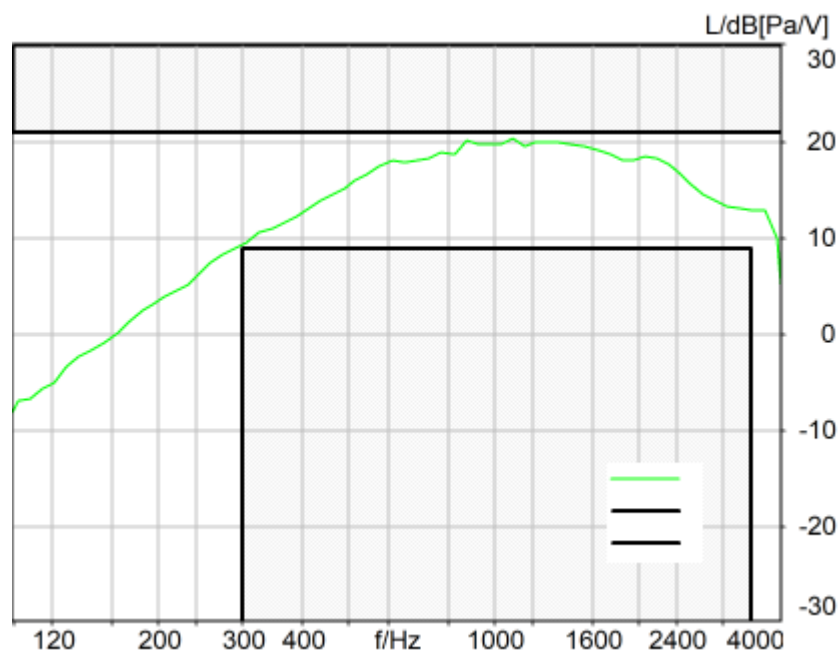
2	500Hz	34.22 dB
3	630Hz	32.85 dB
4	800Hz	31.46 dB
5	1000Hz	29.24 dB
6	1250Hz	24.49 dB
7	1600Hz	24.14 dB
8	2000Hz	21.94 dB
9	2500Hz	29.20 dB
10	3150Hz	34.17 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.94dB at 2000Hz.

2024/4/2 14:13 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



Absolute minimal distance
0.68 dB at 1088.7 Hz Ok

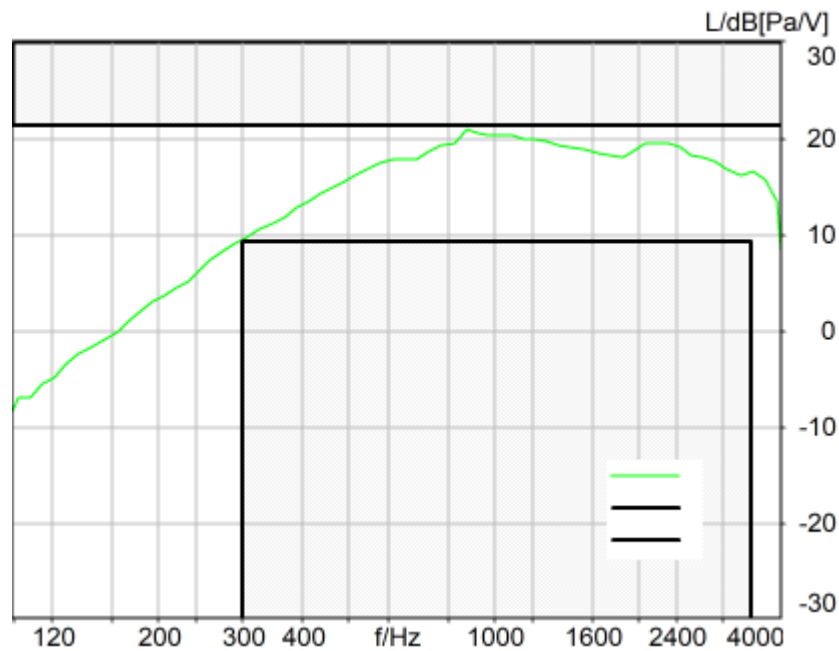
Ok

2024/4/2 13:48 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



Absolute minimal distance

0.31 dB at 873.9 Hz Ok

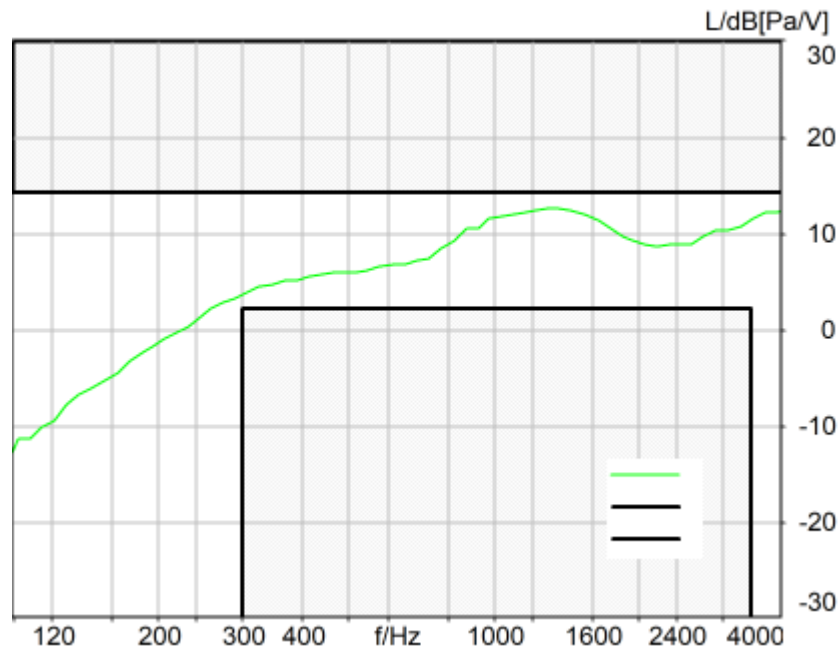
Ok

2024/4/2 13:48 ACQUA 5.1.200

Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



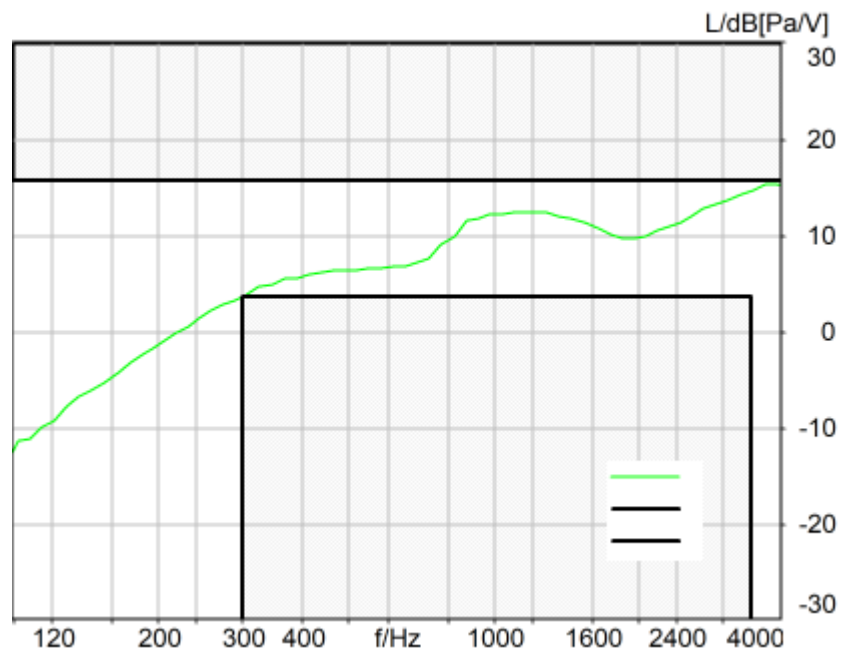
Absolute minimal distance
1.63 dB at 1285.9 Hz Ok

Ok

2024/4/2 14:13 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.27 dB at 3882.4 Hz Ok

Ok

2024/4/2 14:14 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor