Measurement Protocol

Measurement Object	WIFI 5.3G_802.11a 6M_EVS WB 128kbps_CH60
Description	CJWQ-W7L-P23120020 DTNC PM95

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

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5.1b Receive Volume Control Performance 2N WB, Index: 1 4
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5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 6
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 8
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1250 Hz WB, Index: 1 10
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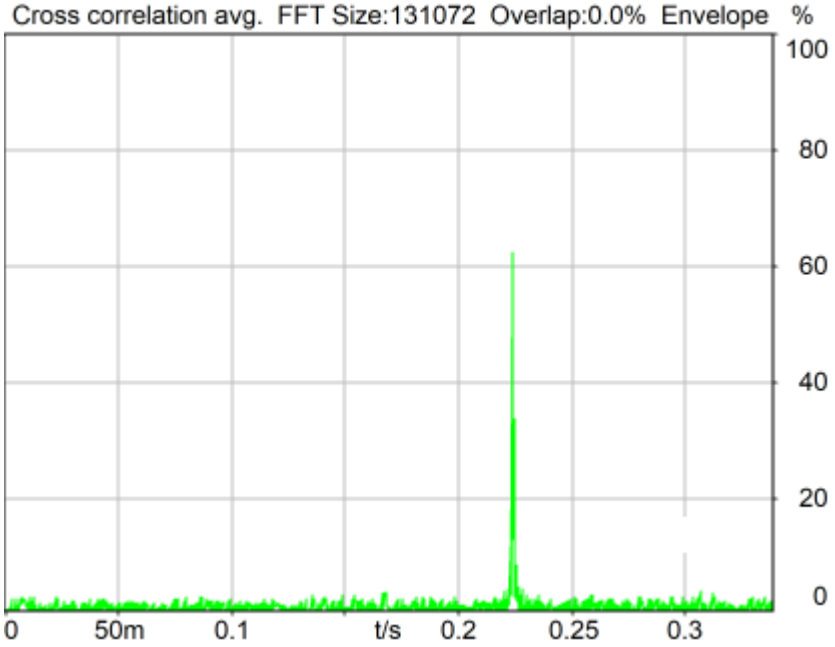
Overall Receive Delay WB, Index: 1

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

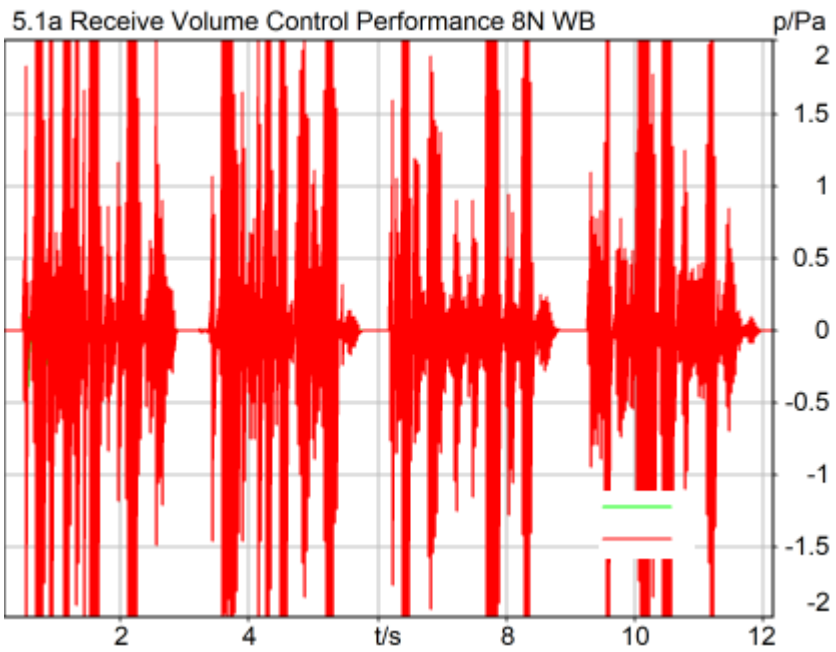


Delay (Cross): 224.2 ms

2024/4/2 13:49 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

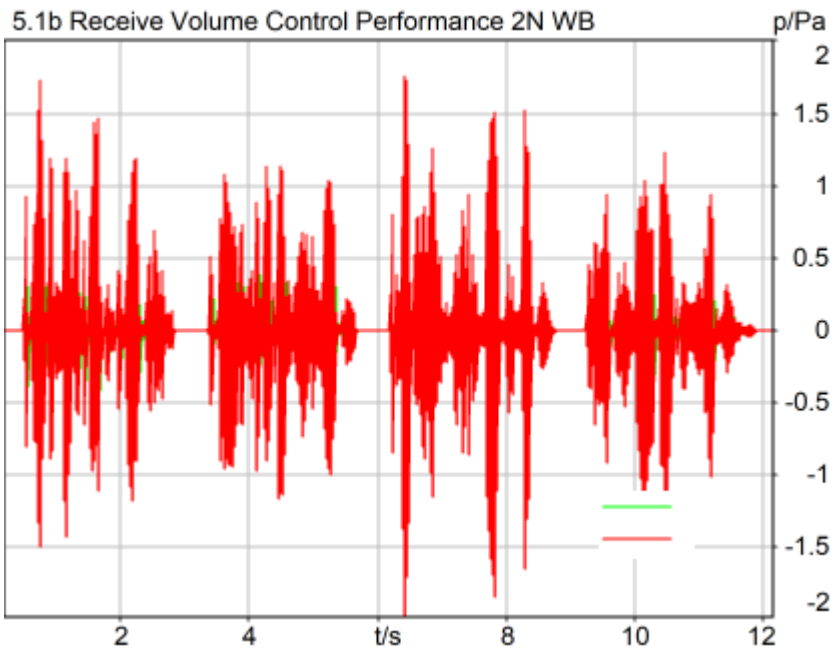
Speech Level RCV: 87.13 dB[SPL], Act.: 81.08%
Corrected Speech Level: 17.13 dB[SPL] Ok

Ok

2024/4/2 13:50 ACQUA 5.1.200

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

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



Correction

X - 70

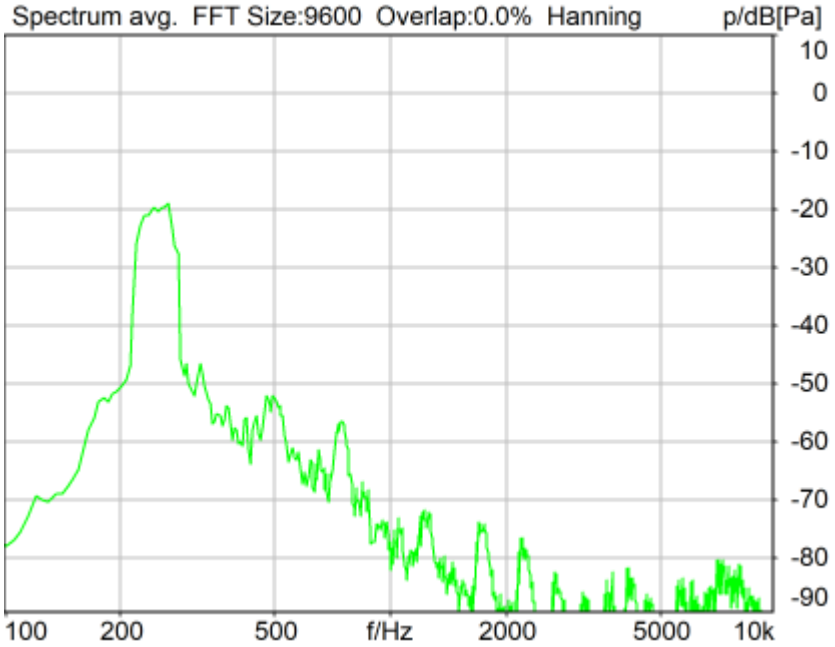
Speech Level RCV: 78.71 dB[SPL], Act.: 84.08%
Corrected Speech Level: 8.71 dB[SPL] Ok

Ok

2024/4/2 14:01 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



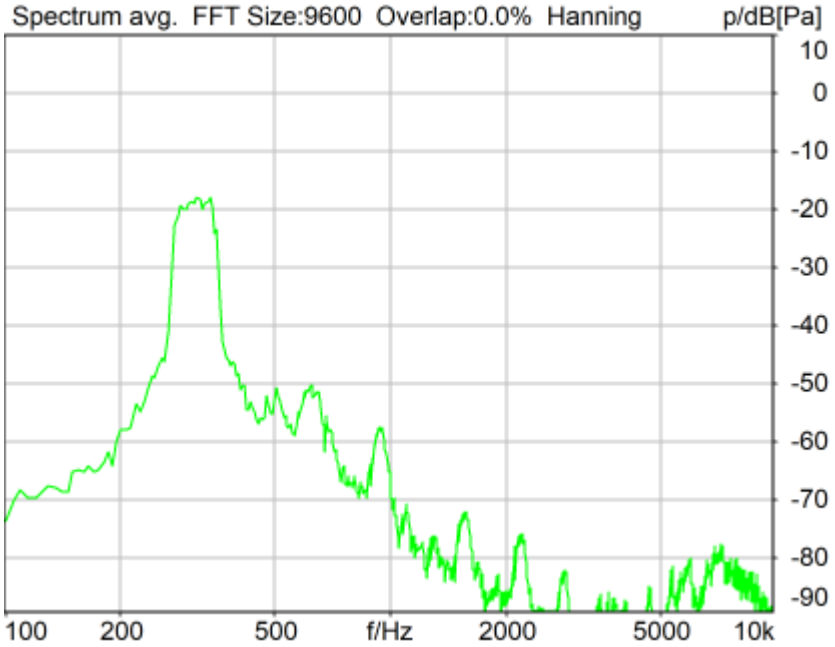
Distortion (Noise) RCV (packed): 30.53 dB (2.97%) Ok

Ok

2024/4/2 13:50 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



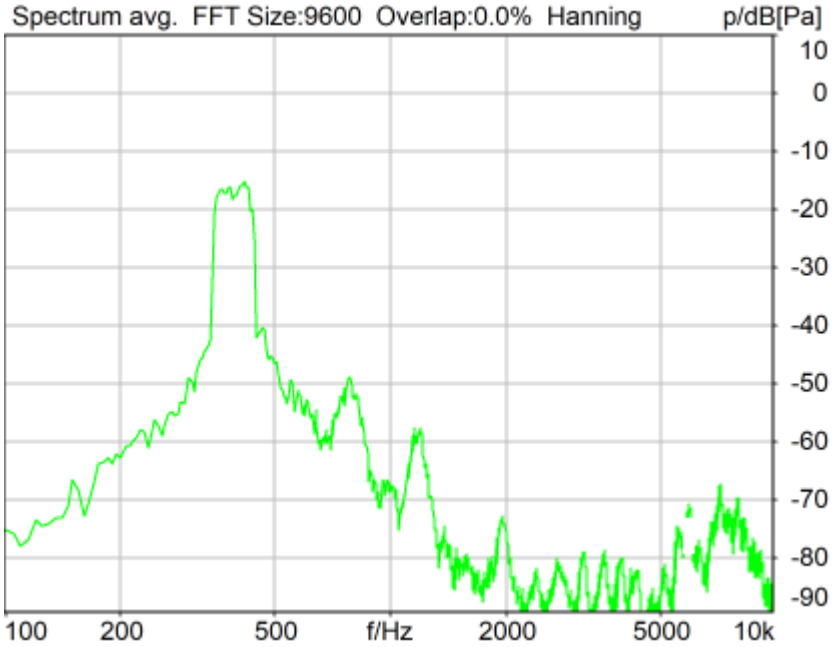
Distortion (Noise) RCV (packed): 29.97 dB (3.17%) Ok

Ok

2024/4/2 13:50 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



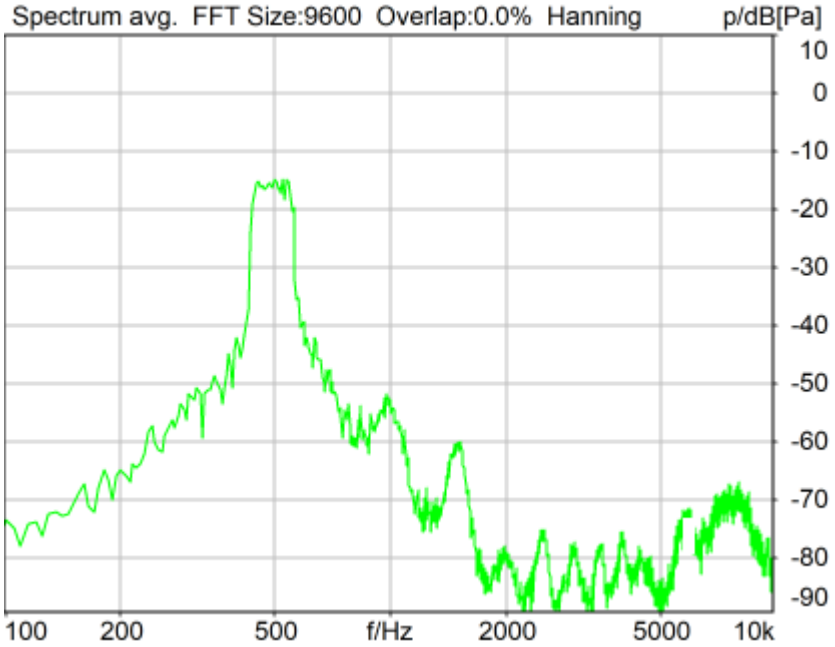
Distortion (Noise) RCV (packed): 30.20 dB (3.09%) Ok

Ok

2024/4/2 13:51 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



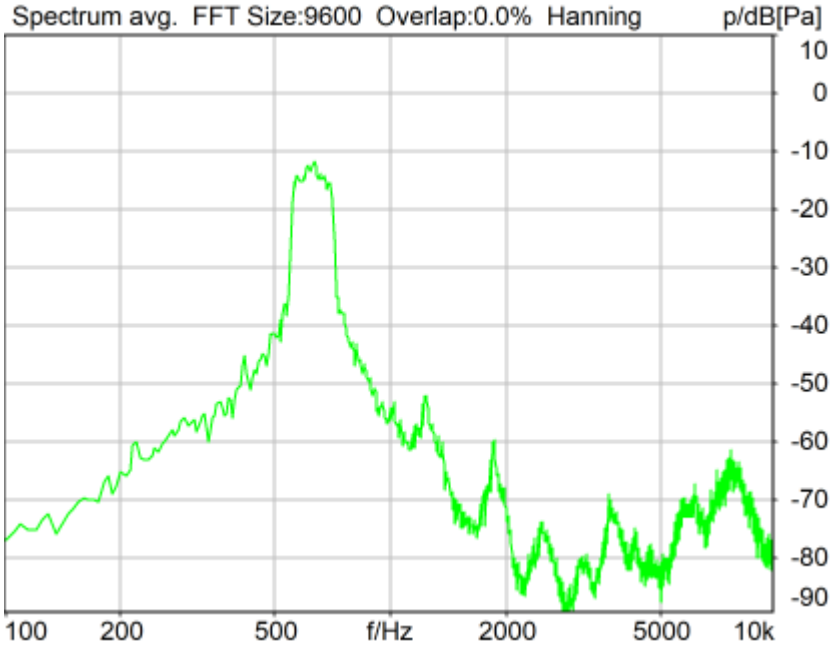
Distortion (Noise) RCV (packed): 29.20 dB (3.47%) Ok

Ok

2024/4/2 13:51 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



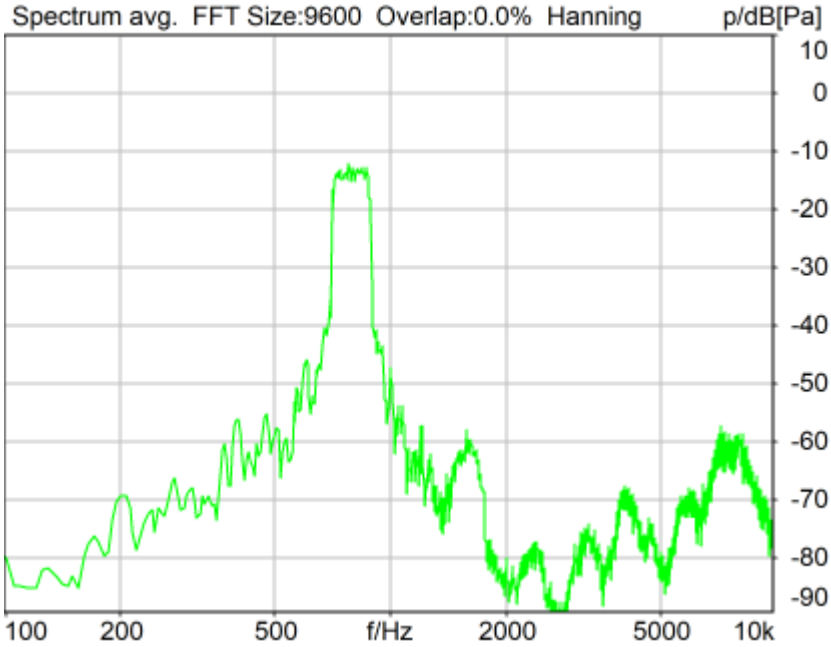
Distortion (Noise) RCV (packed): 28.33 dB (3.83%) Ok

Ok

2024/4/2 13:52 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



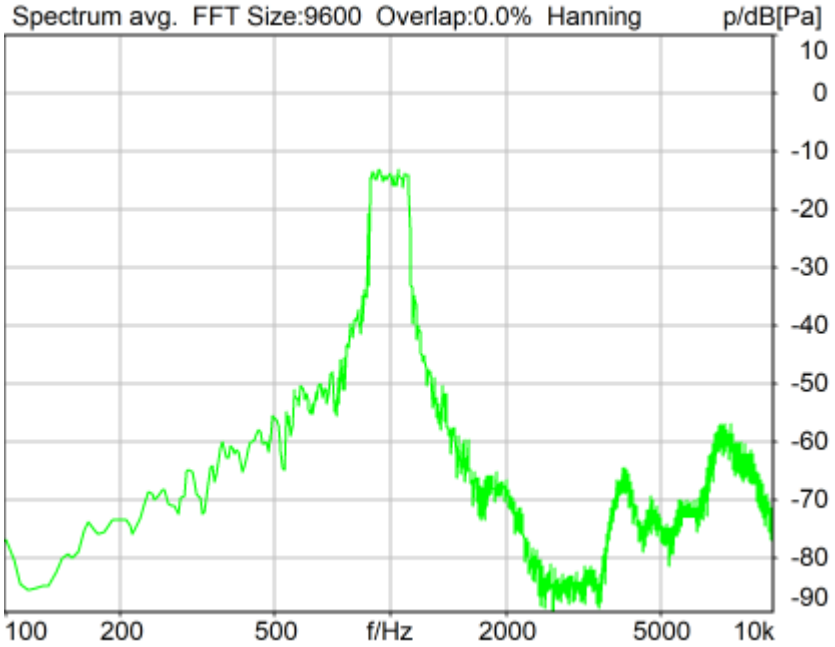
Distortion (Noise) RCV (packed): 32.36 dB (2.41%) Ok

Ok

2024/4/2 13:52 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



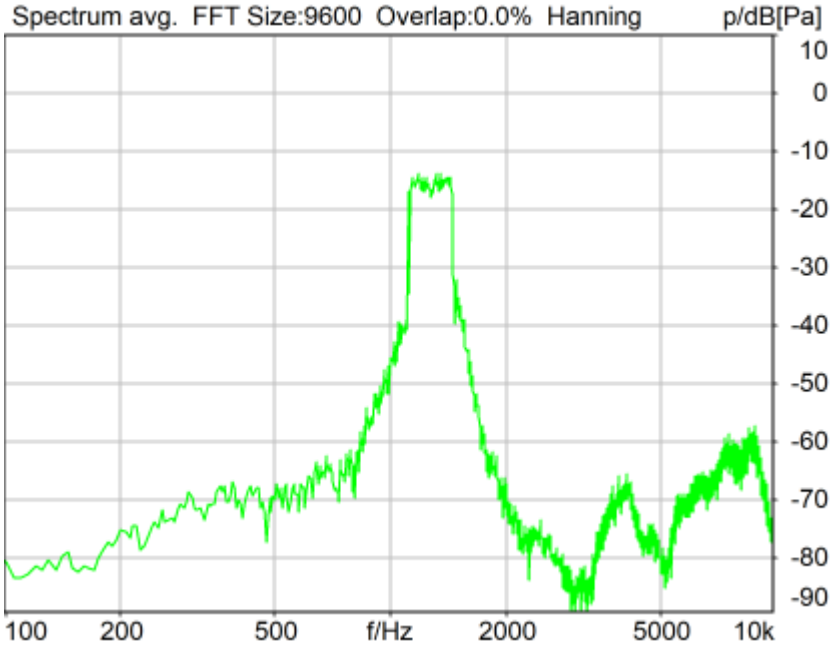
Distortion (Noise) RCV (packed): 26.95 dB (4.49%) Ok

Ok

2024/4/2 13:52 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



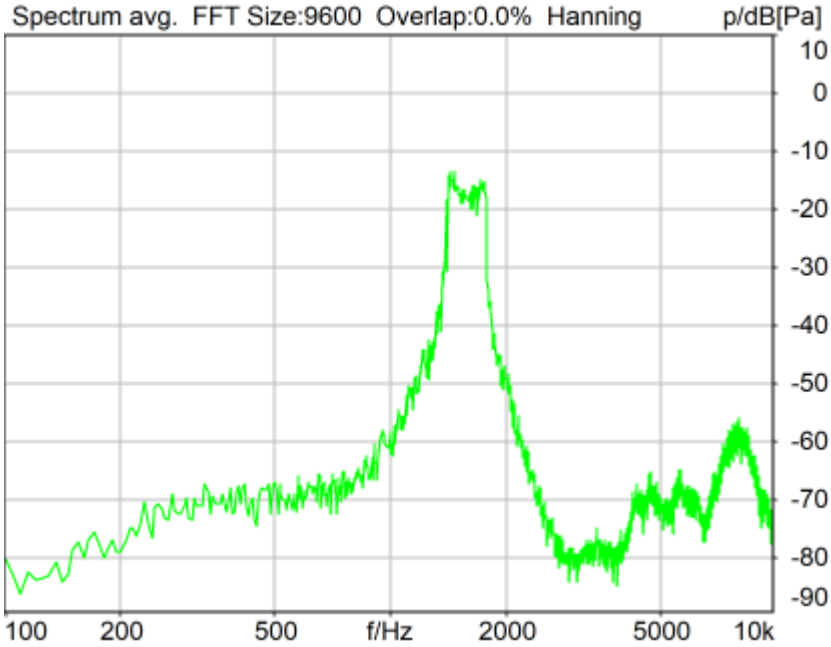
Distortion (Noise) RCV (packed): 23.54 dB (6.65%) Ok

Ok

2024/4/2 13:56 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



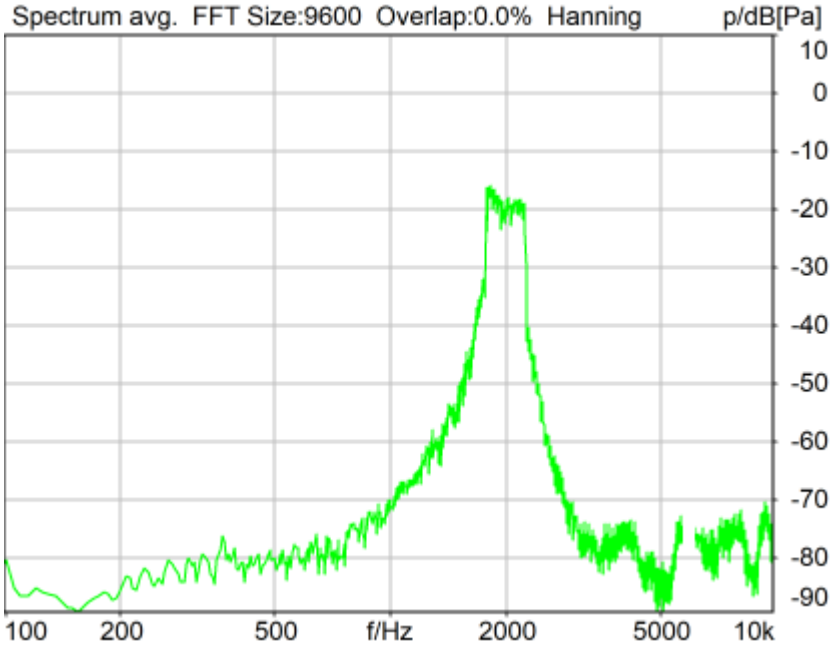
Distortion (Noise) RCV (packed): 24.09 dB (6.25%) Ok

Ok

2024/4/2 13:57 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



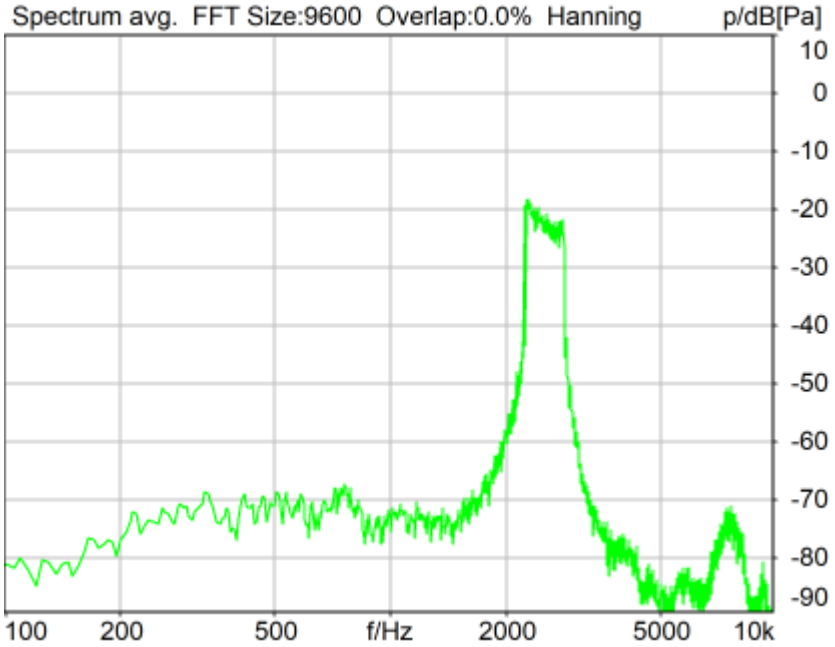
Distortion (Noise) RCV (packed): 21.99 dB (7.95%) Ok

Ok

2024/4/2 13:57 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



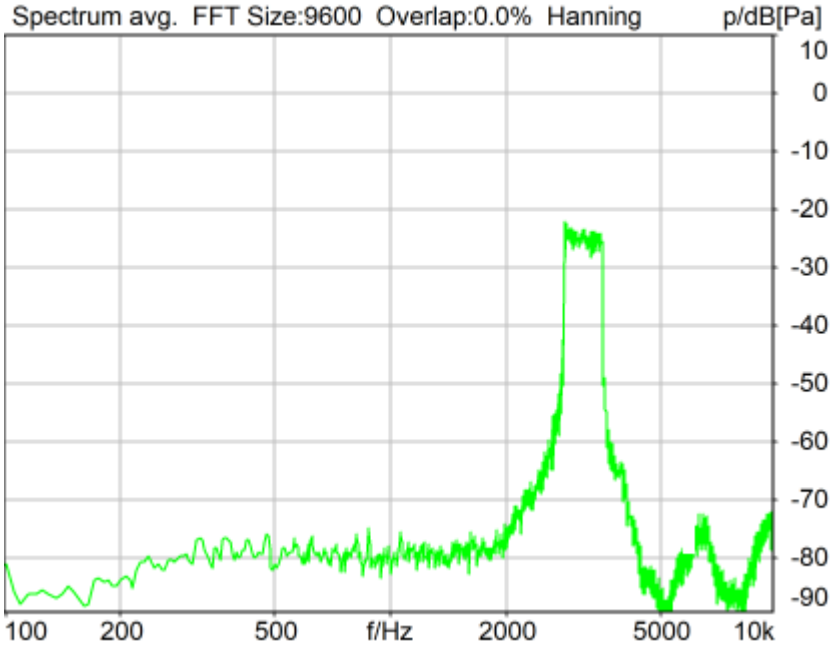
Distortion (Noise) RCV (packed): 29.83 dB (3.22%) Ok

Ok

2024/4/2 13:58 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



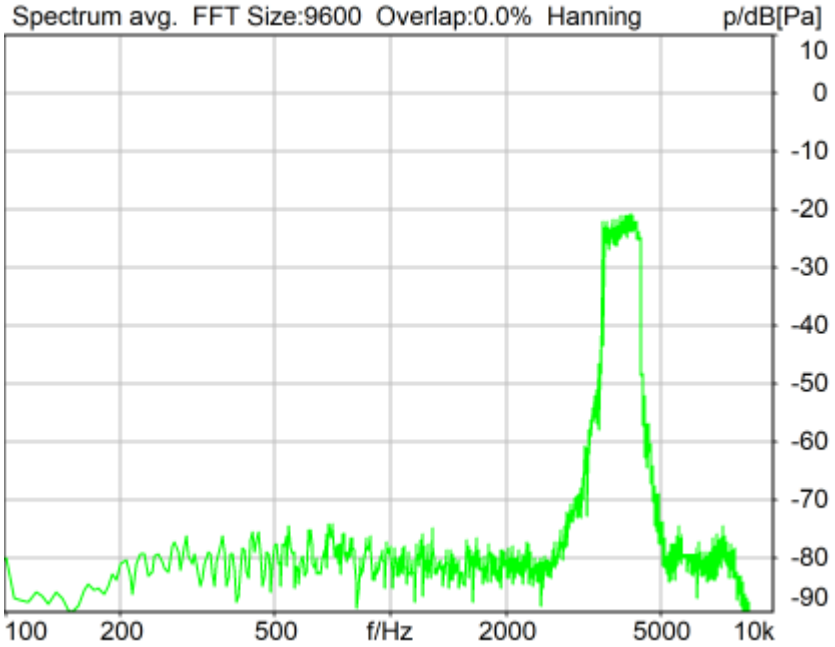
Distortion (Noise) RCV (packed): 32.13 dB (2.48%) Ok

Ok

2024/4/2 13:58 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



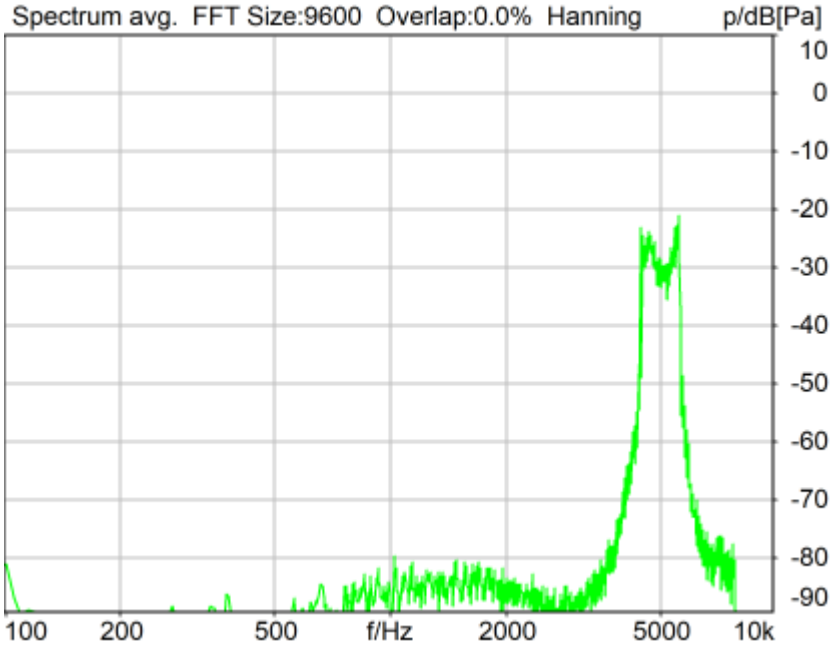
Distortion (Noise) RCV (packed): 32.16 dB (2.47%) Ok

Ok

2024/4/2 13:59 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): 30.60 dB (2.95%) Ok

Ok

2024/4/2 13:59 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

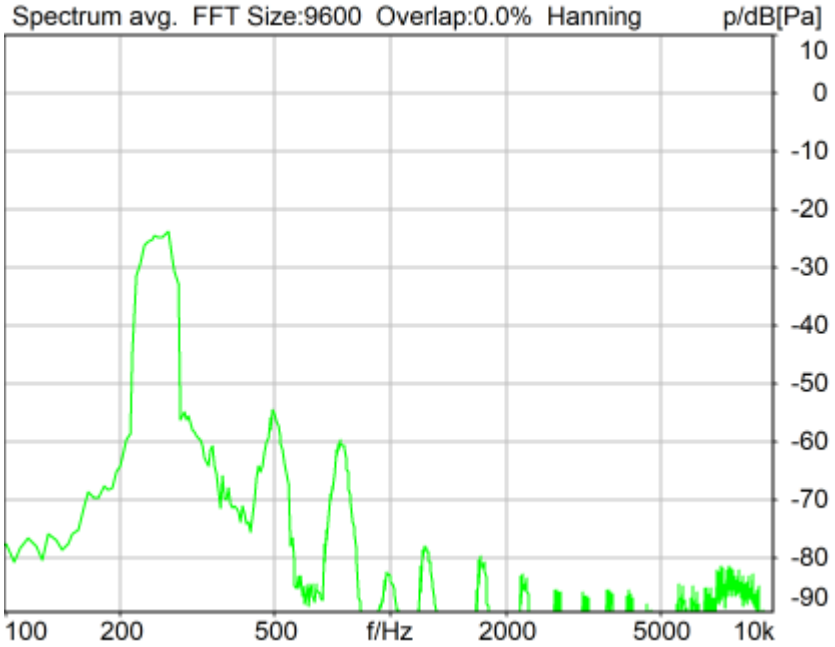
Region	Frequency	SDNR
1	250Hz	30.53 dB
2	315Hz	29.97 dB
3	400Hz	30.20 dB
4	500Hz	29.20 dB
5	630Hz	28.33 dB
6	800Hz	32.36 dB
7	1000Hz	26.95 dB
8	1250Hz	23.54 dB
9	1600Hz	24.09 dB
10	2000Hz	21.99 dB
11	2500Hz	29.83 dB
12	3150Hz	32.13 dB
13	4000Hz	32.16 dB
14	5000Hz	30.60 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.99dB at 2000Hz.

2024/4/2 13:59 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



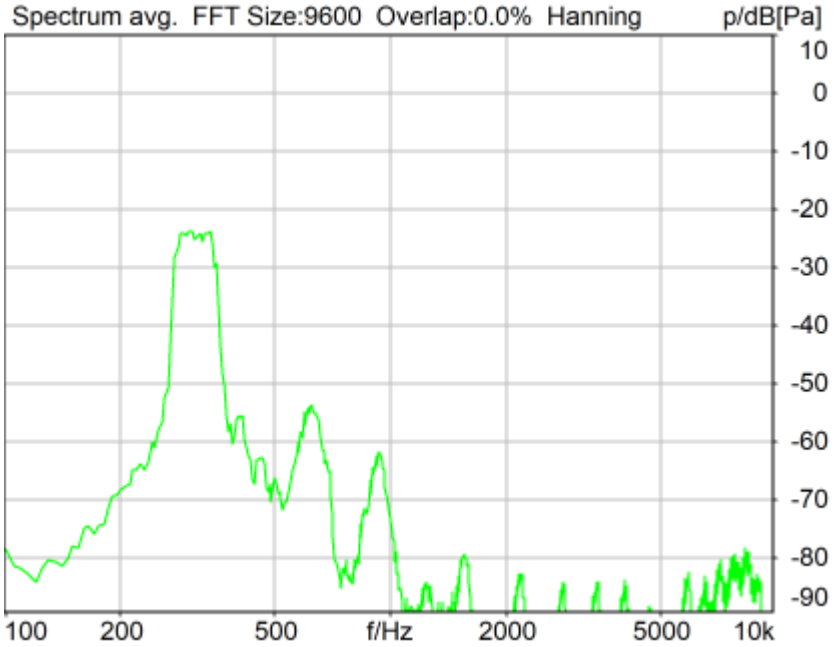
Distortion (Noise) RCV (packed): 31.29 dB (2.73%) Ok

Ok

2024/4/2 14:02 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



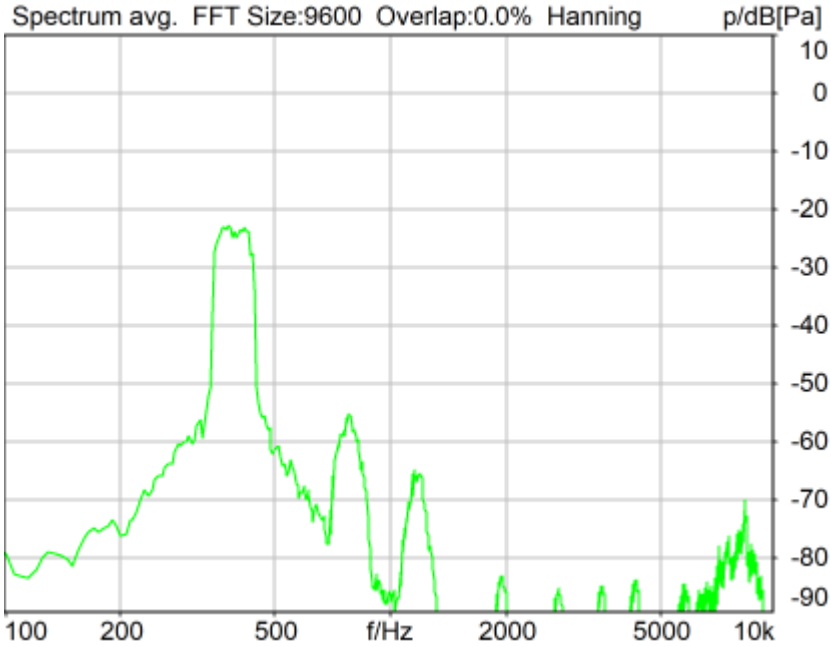
Distortion (Noise) RCV (packed): 30.35 dB (3.04%) Ok

Ok

2024/4/2 14:02 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



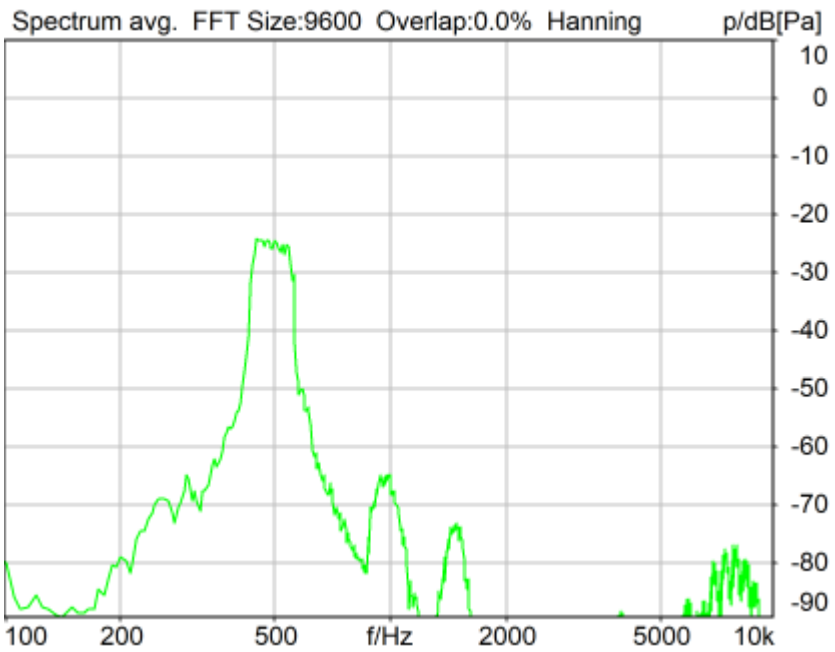
Distortion (Noise) RCV (packed): 31.68 dB (2.61%) Ok

Ok

2024/4/2 14:03 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



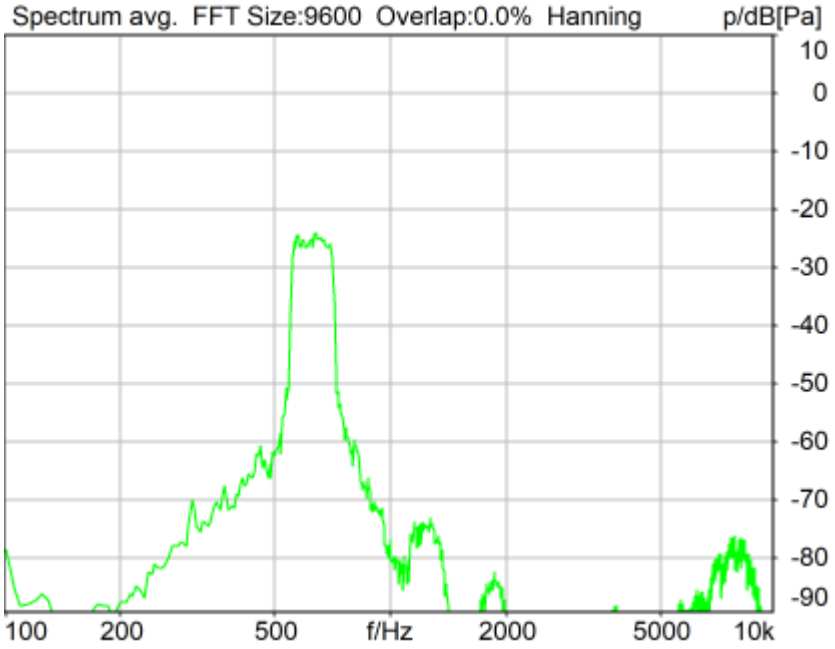
Distortion (Noise) RCV (packed): 33.06 dB (2.22%) Ok

Ok

2024/4/2 14:03 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



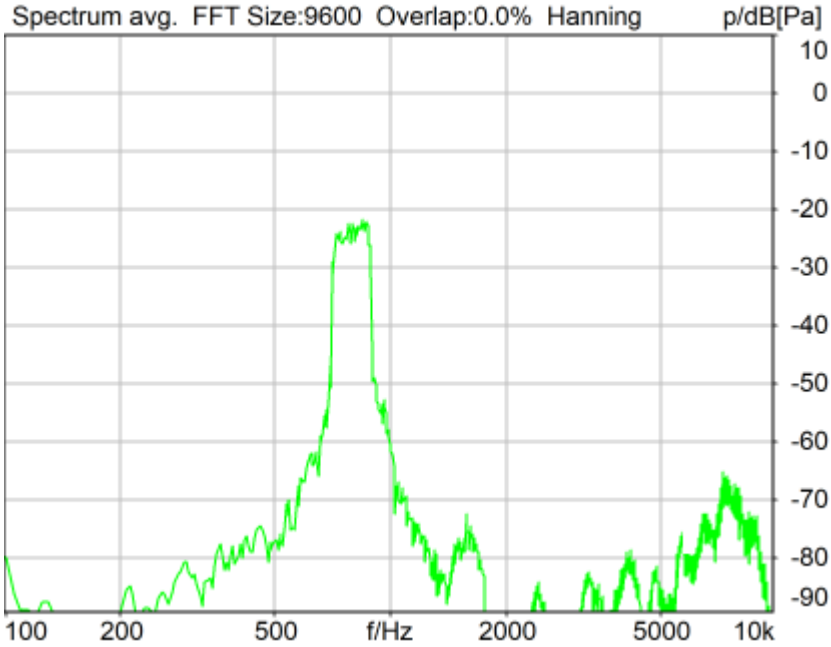
Distortion (Noise) RCV (packed): 35.06 dB (1.77%) Ok

Ok

2024/4/2 14:03 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



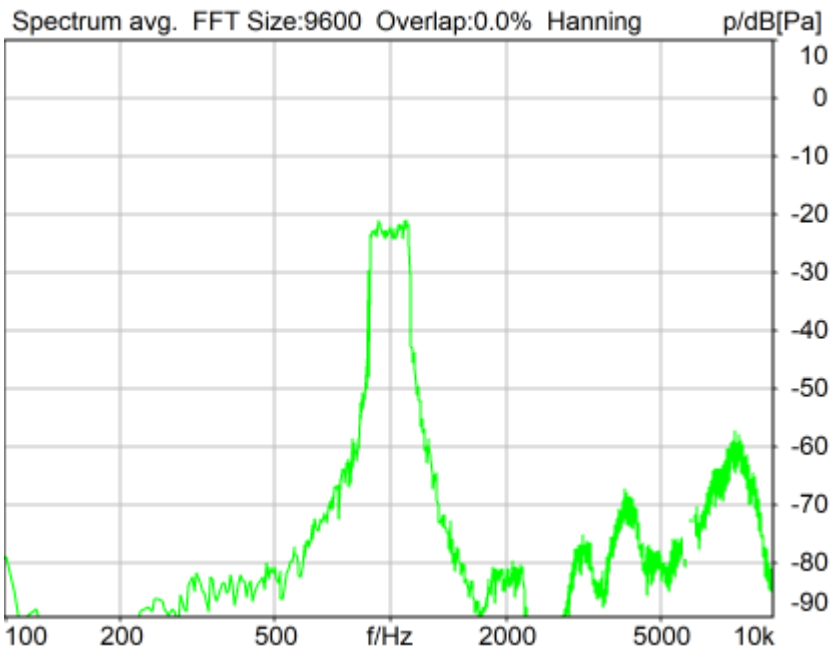
Distortion (Noise) RCV (packed): 32.42 dB (2.39%) Ok

Ok

2024/4/2 14:04 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



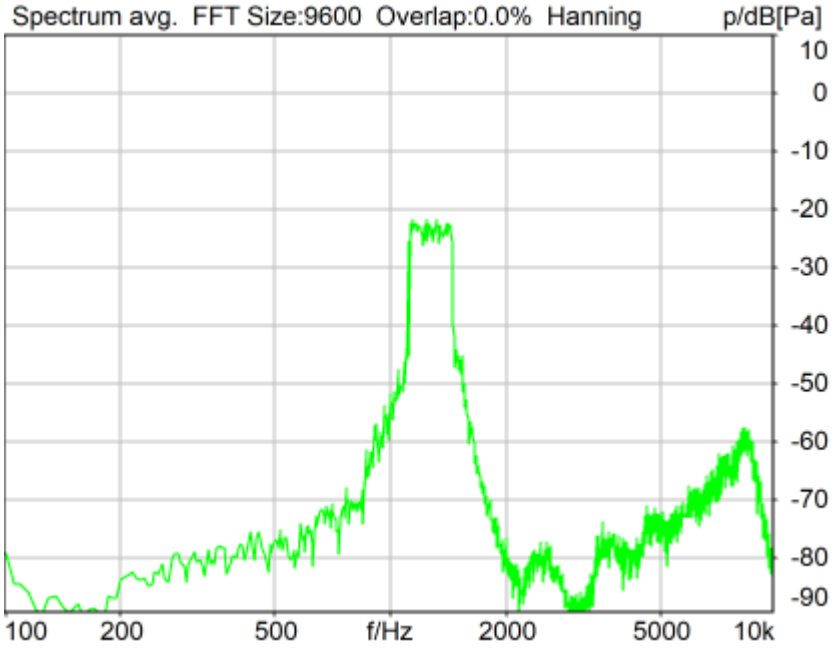
Distortion (Noise) RCV (packed): 29.15 dB (3.49%) Ok

Ok

2024/4/2 14:04 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



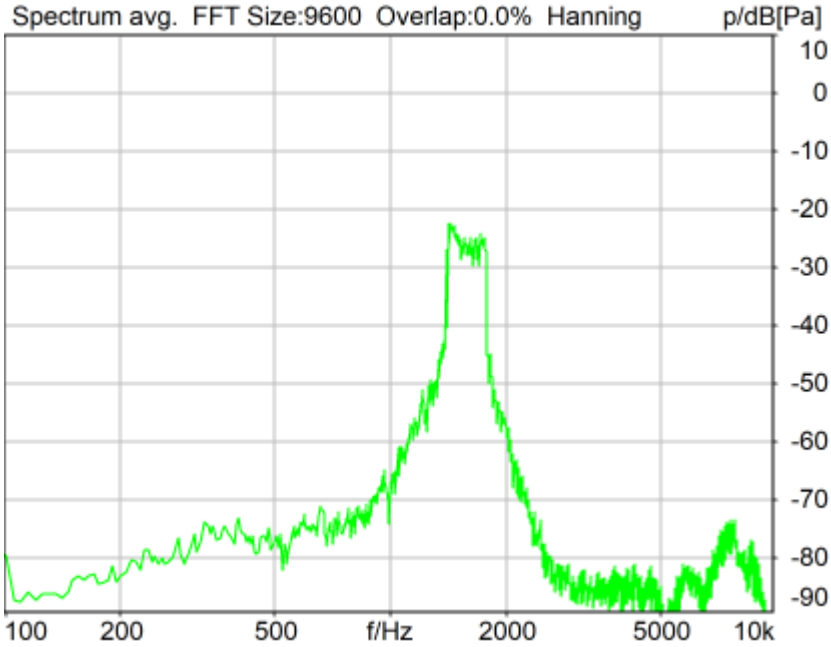
Distortion (Noise) RCV (packed): 24.21 dB (6.16%) Ok

Ok

2024/4/2 14:05 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



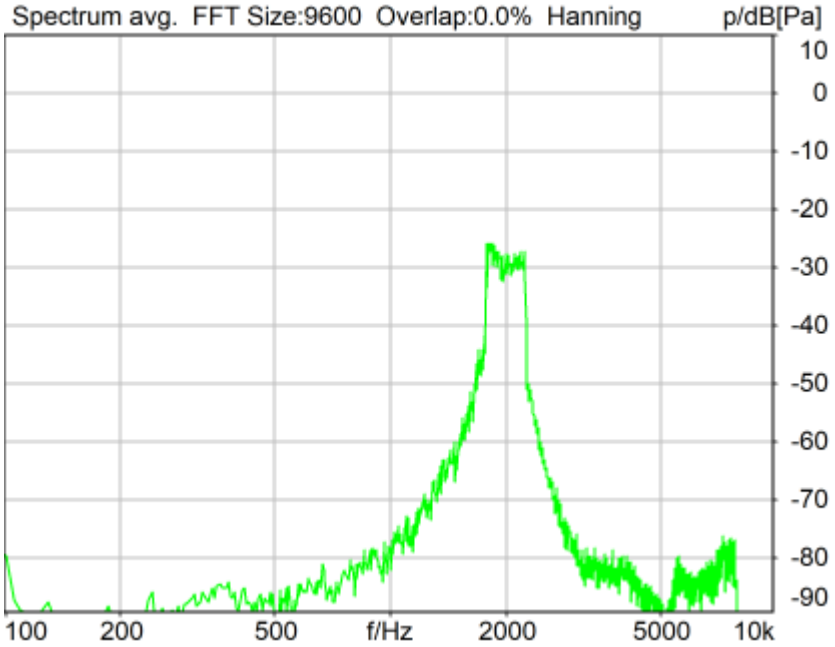
Distortion (Noise) RCV (packed): 24.26 dB (6.13%) Ok

Ok

2024/4/2 14:05 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



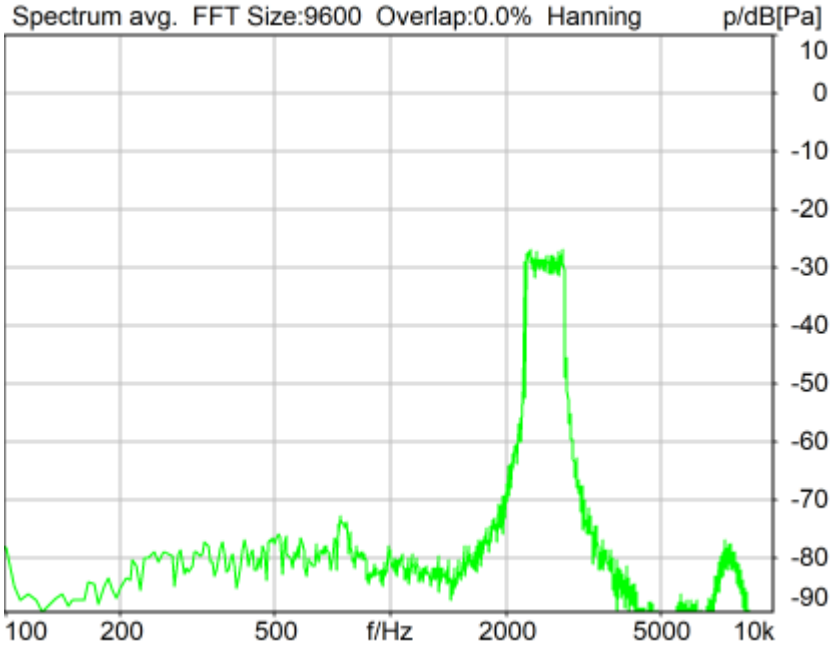
Distortion (Noise) RCV (packed): 22.41 dB (7.58%) Ok

Ok

2024/4/2 14:06 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



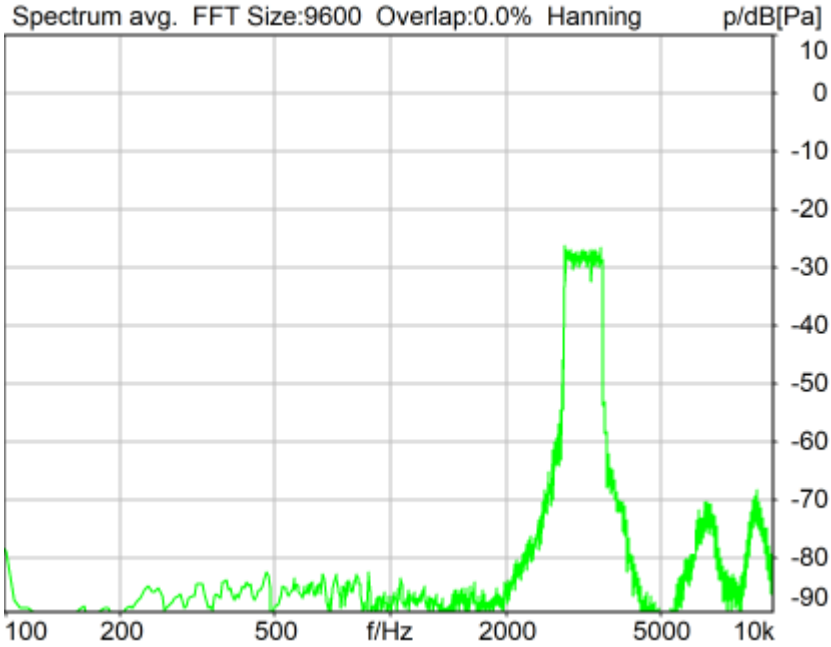
Distortion (Noise) RCV (packed): 28.76 dB (3.65%) Ok

Ok

2024/4/2 14:06 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



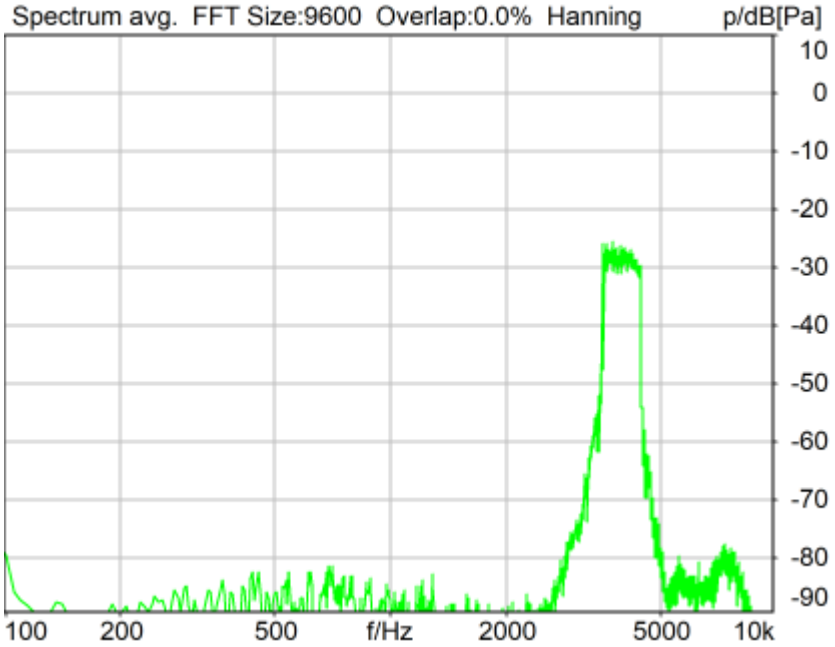
Distortion (Noise) RCV (packed): 33.40 dB (2.14%) Ok

Ok

2024/4/2 14:06 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



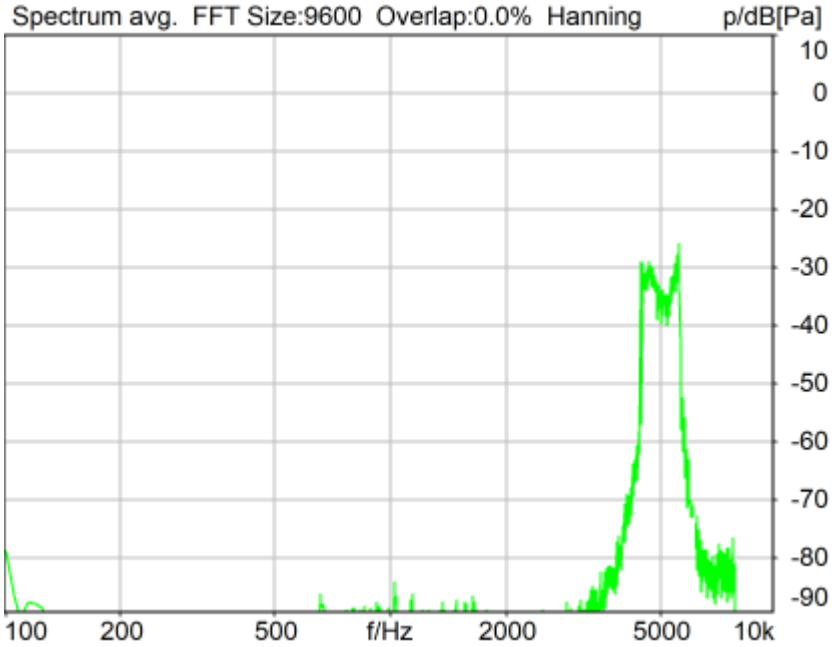
Distortion (Noise) RCV (packed): 31.93 dB (2.53%) Ok

Ok

2024/4/2 14:07 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): 30.32 dB (3.05%) Ok

Ok

2024/4/2 14:07 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

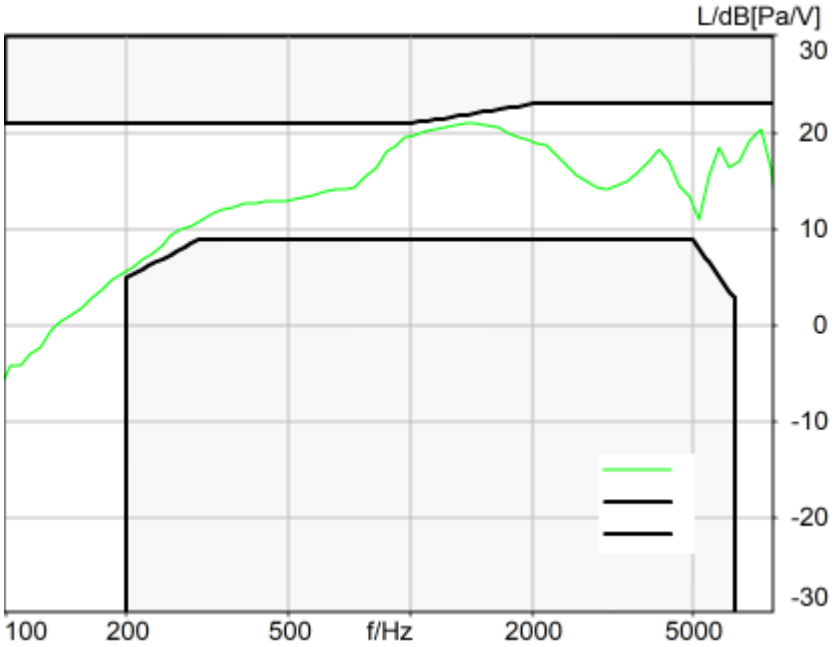
Region	Frequency	SDNR
1	250Hz	31.29 dB
2	315Hz	30.35 dB
3	400Hz	31.68 dB
4	500Hz	33.06 dB
5	630Hz	35.06 dB
6	800Hz	32.42 dB
7	1000Hz	29.15 dB
8	1250Hz	24.21 dB
9	1600Hz	24.26 dB
10	2000Hz	22.41 dB
11	2500Hz	28.76 dB
12	3150Hz	33.40 dB
13	4000Hz	31.93 dB
14	5000Hz	30.32 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.41dB at 2000Hz.

2024/4/2 14:07 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



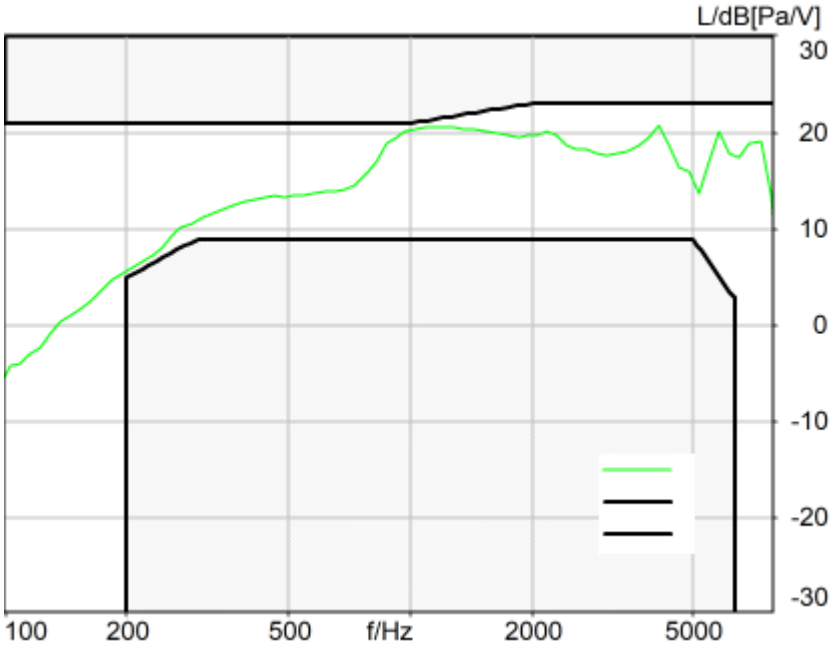
Absolute minimal distance
0.89 dB at 1216.1 Hz Ok

Ok

2024/4/2 13:59 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



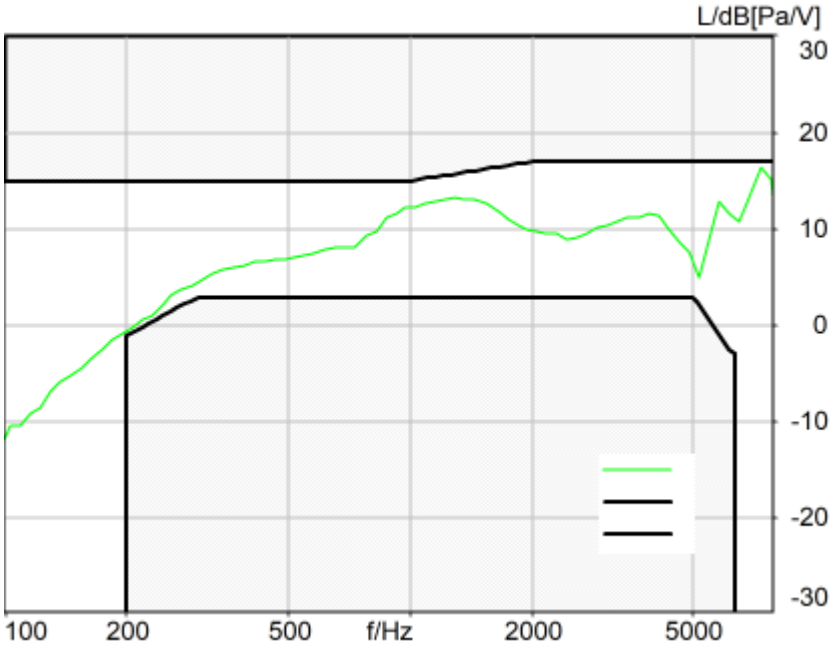
Absolute minimal distance
0.68 dB at 1088.7 Hz Ok

Ok

2024/4/2 14:00 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



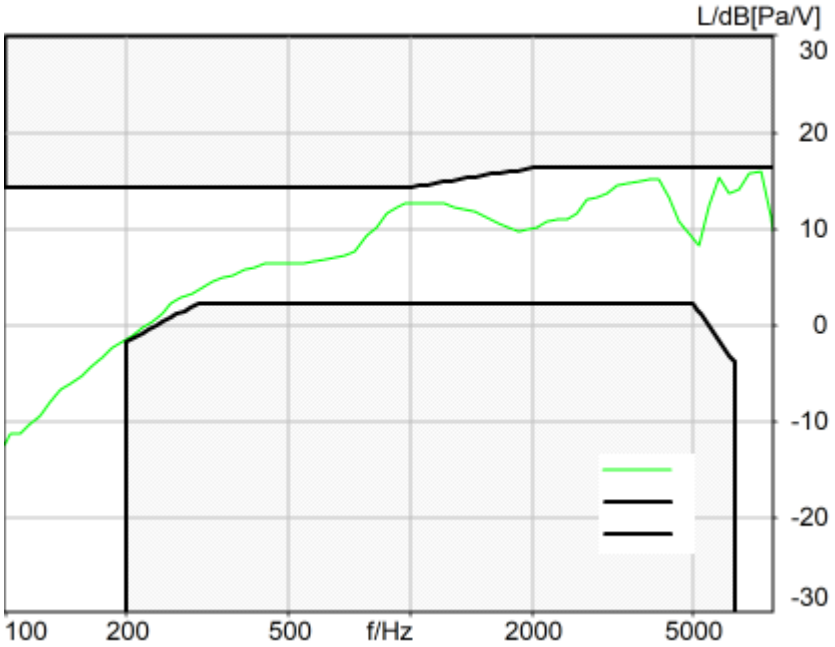
Absolute minimal distance
0.54 dB at 7315.0 Hz Ok

Ok

2024/4/18 17:24 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
0.38 dB at 7315.0 Hz Ok

Ok

2024/4/2 14:08 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

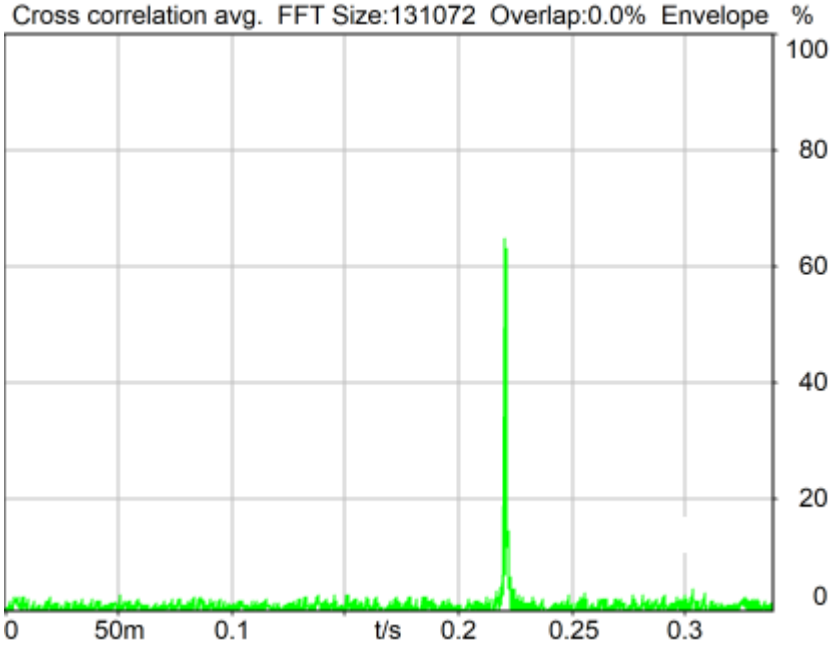
Measurement Object	WIFI 5.5G_802.11a 6M_EVS NB 24.4kbps_CH132
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:19
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

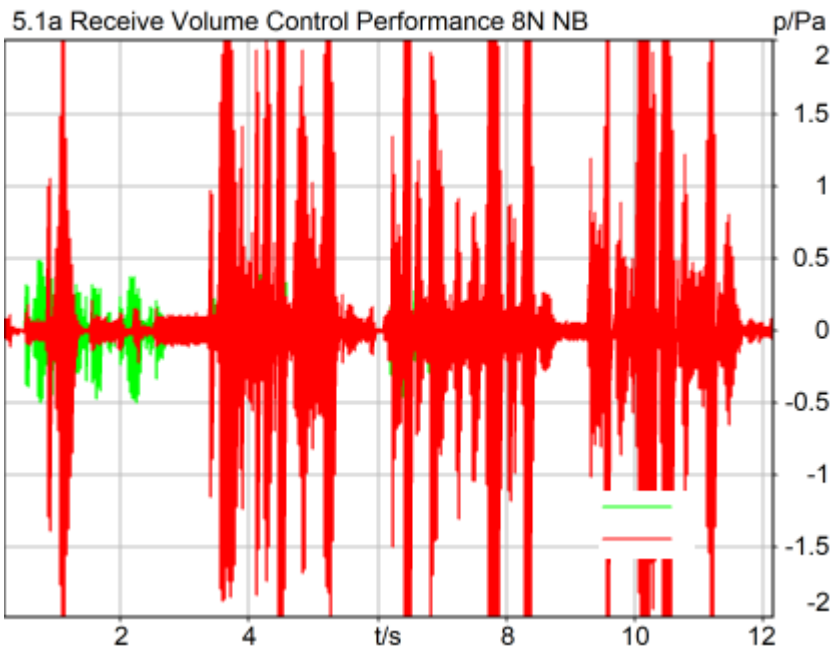


Delay (Cross): 221.0 ms

2024/4/2 17:10 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

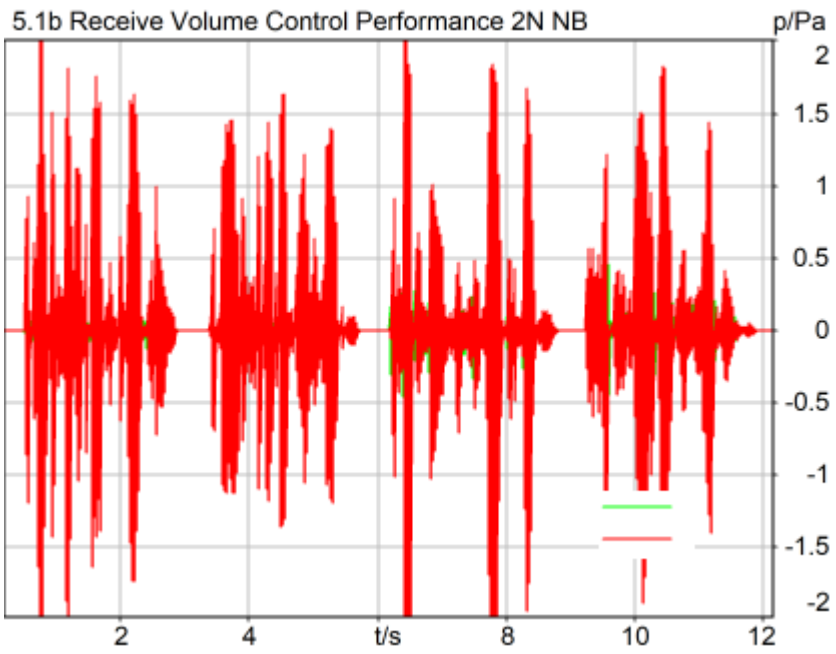
Speech Level RCV: 86.43 dB[SPL], Act.: 65.76%
Corrected Speech Level: 16.43 dB[SPL] Ok

Ok

2024/4/2 17:17 ACQUA 5.1.200

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

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



Correction

X - 70

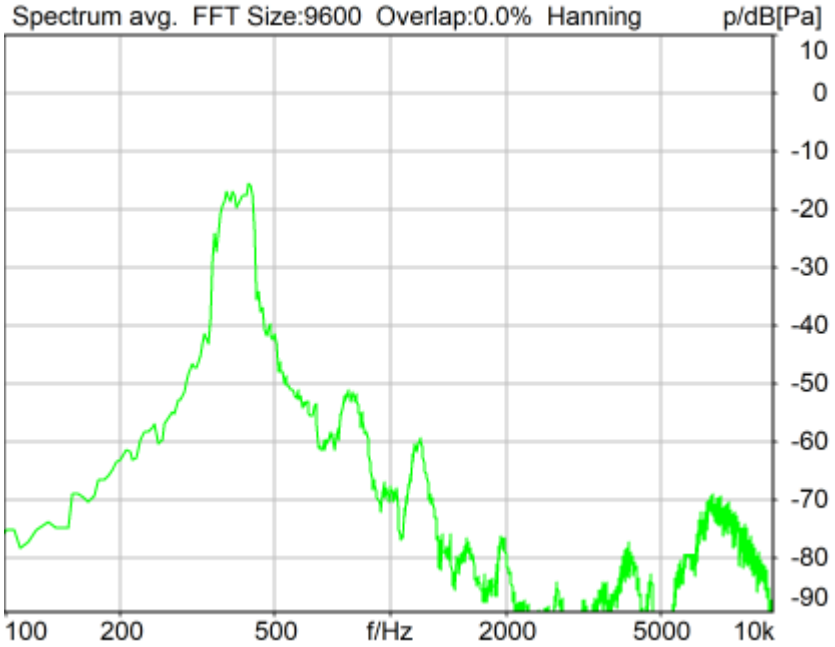
Channel	Speech level	Activity	Corrected speech level	
RCV	81.87 dB[SPL]	79.83%	11.87 dB[SPL]	Ok

Ok

2024/4/23 10:32 ACQUA 6.0.200

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

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



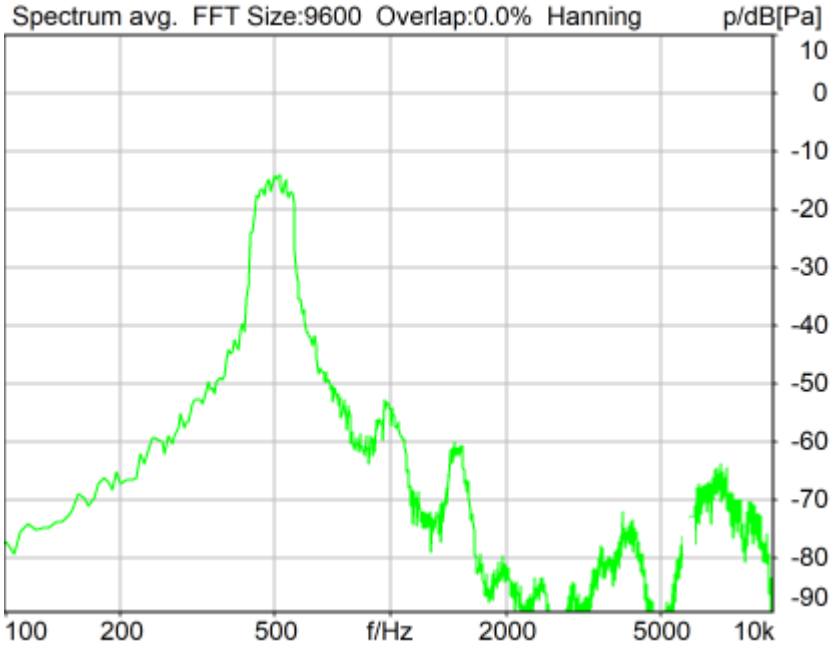
Distortion (Noise) RCV (packed): 28.16 dB (3.91%) Ok

Ok

2024/4/2 17:18 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



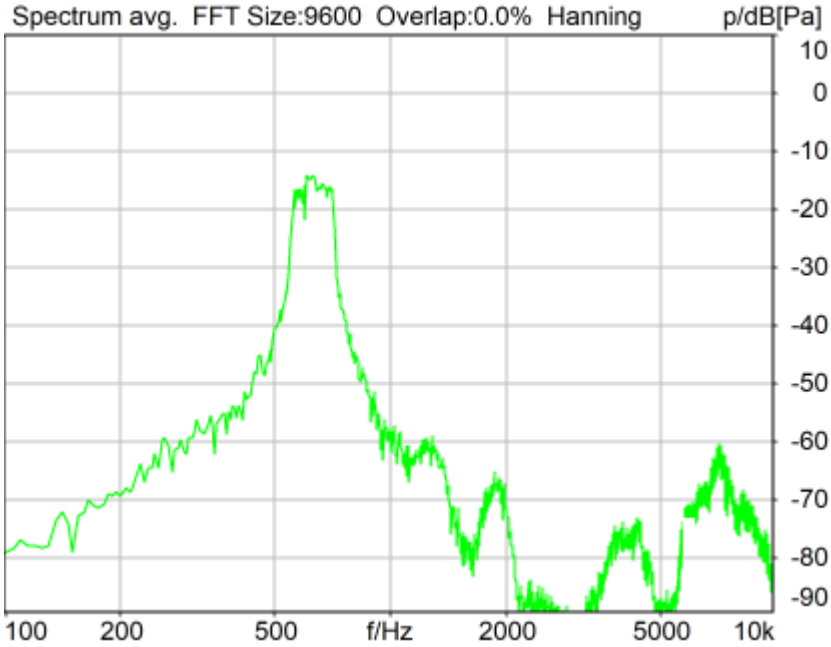
Distortion (Noise) RCV (packed): 28.44 dB (3.79%) Ok

Ok

2024/4/2 17:18 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



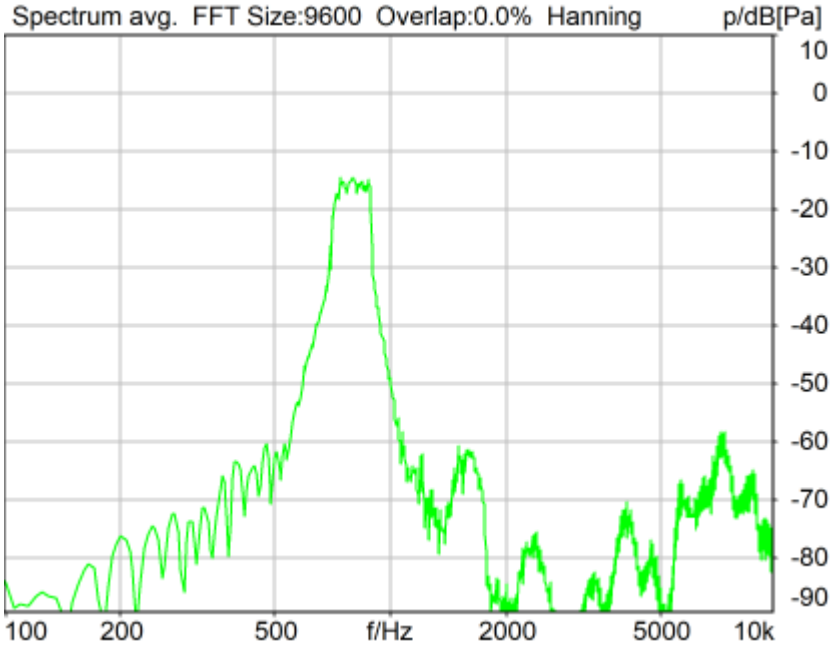
Distortion (Noise) RCV (packed): 26.98 dB (4.48%) Ok

Ok

2024/4/2 17:19 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



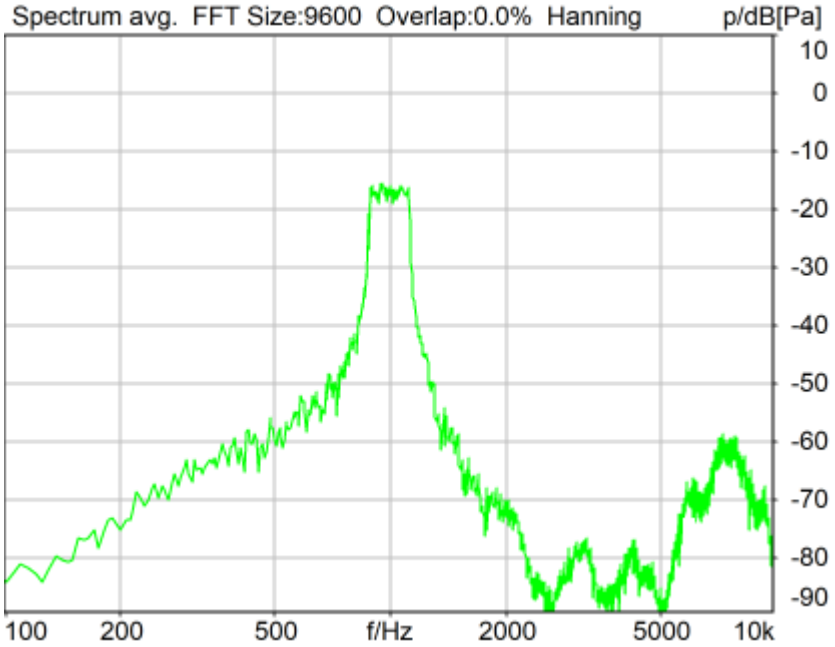
Distortion (Noise) RCV (packed): 27.07 dB (4.43%) Ok

Ok

2024/4/2 17:19 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



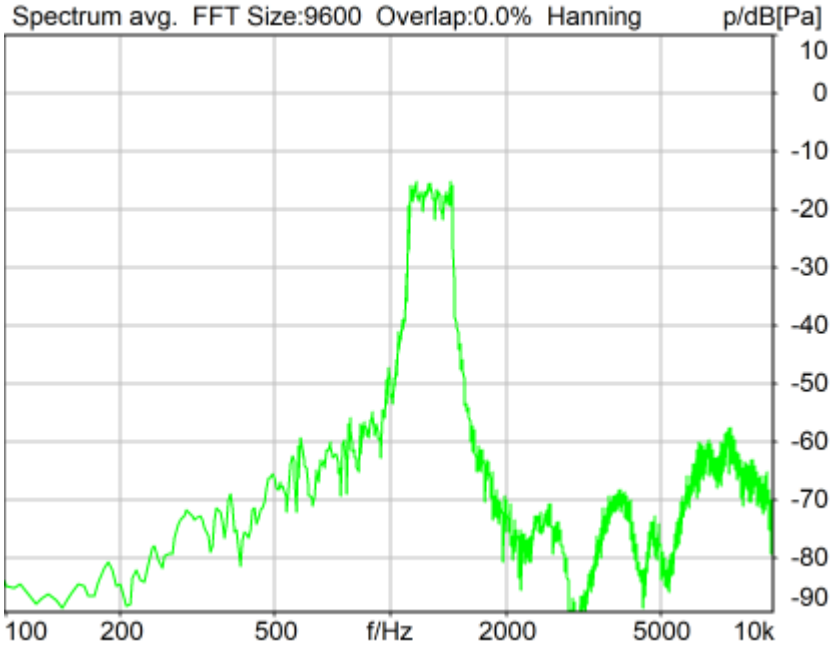
Distortion (Noise) RCV (packed): 25.15 dB (5.53%) Ok

Ok

2024/4/2 17:19 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



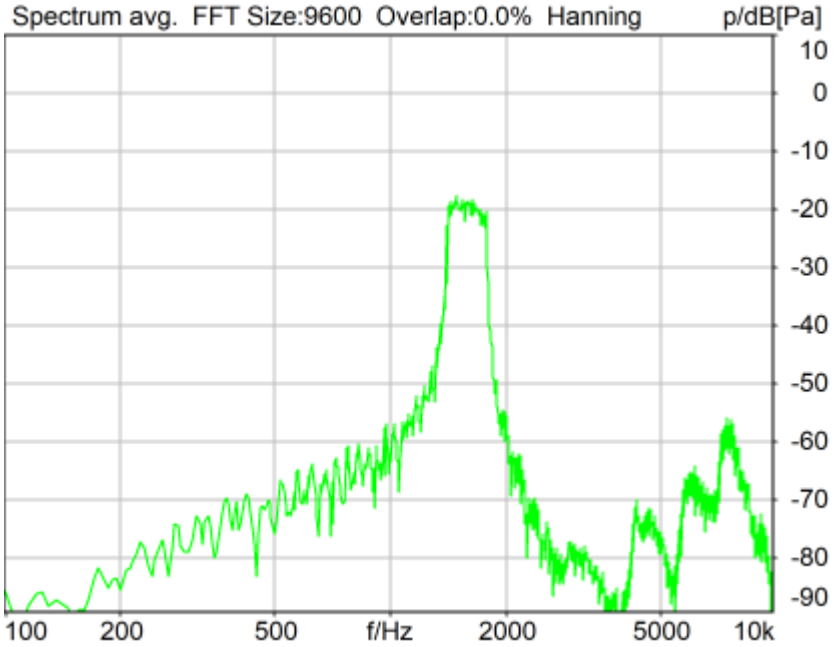
Distortion (Noise) RCV (packed): 23.11 dB (6.99%) Ok

Ok

2024/4/2 17:20 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



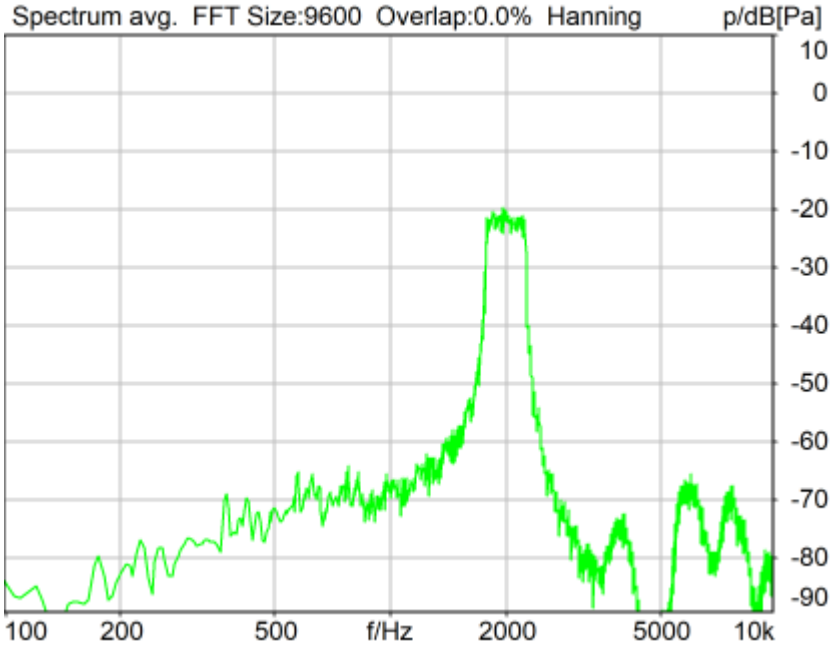
Distortion (Noise) RCV (packed): 26.20 dB (4.90%) Ok

Ok

2024/4/2 17:20 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



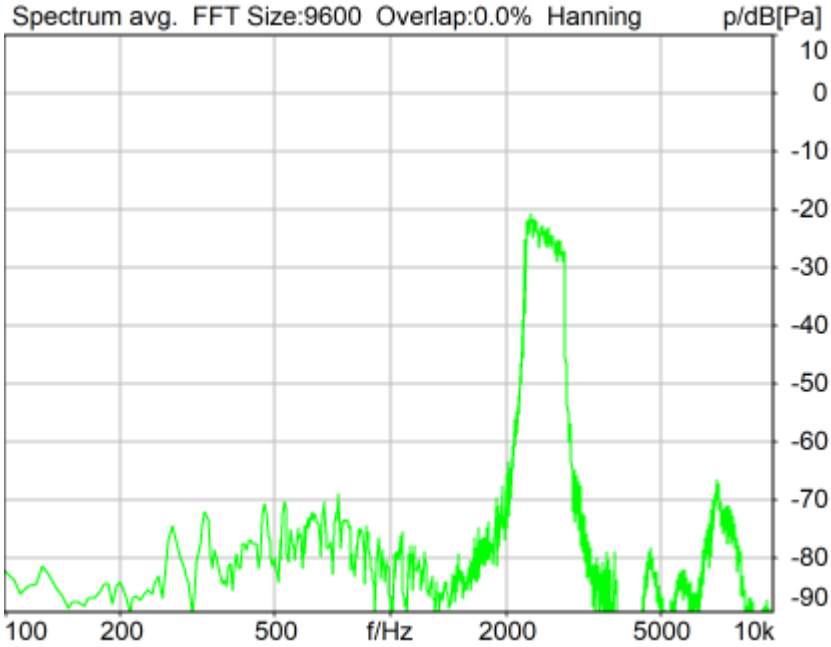
Distortion (Noise) RCV (packed): 25.97 dB (5.03%) Ok

Ok

2024/4/2 17:21 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



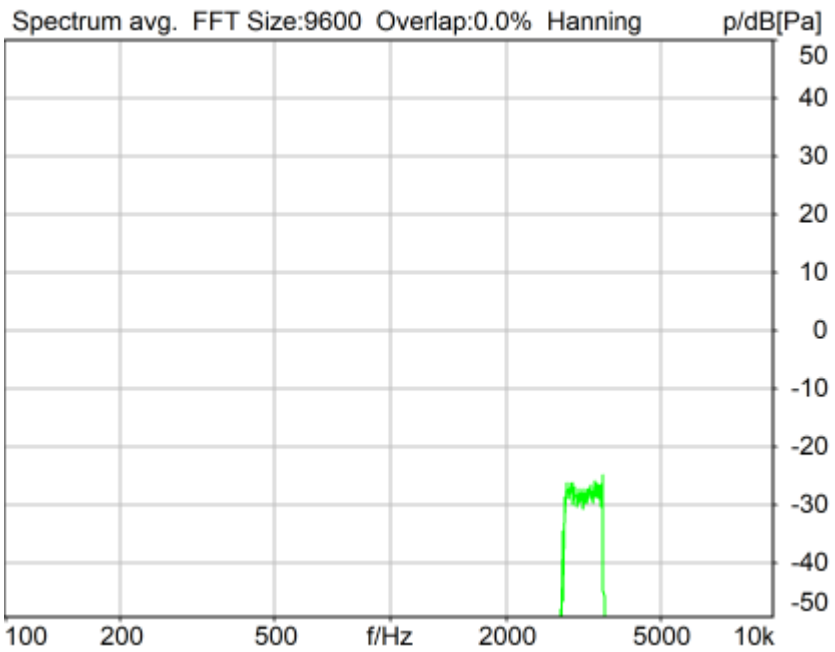
Distortion (Noise) RCV (packed): 30.77 dB (2.90%) Ok

Ok

2024/4/2 17:21 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): 31.00 dB (2.82%) Ok

Ok

2024/4/2 17:21 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

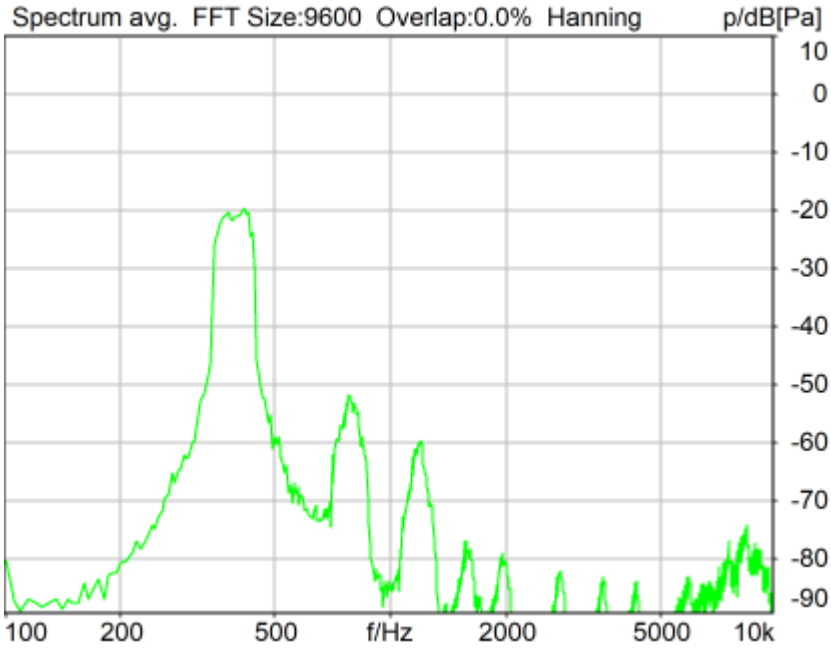
Region	Frequency	SDNR
1	400Hz	28.16 dB
2	500Hz	28.44 dB
3	630Hz	26.98 dB
4	800Hz	27.07 dB
5	1000Hz	25.15 dB
6	1250Hz	23.11 dB
7	1600Hz	26.20 dB
8	2000Hz	25.97 dB
9	2500Hz	30.77 dB
10	3150Hz	31.00 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.11dB at 1250Hz.

2024/4/2 17:21 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



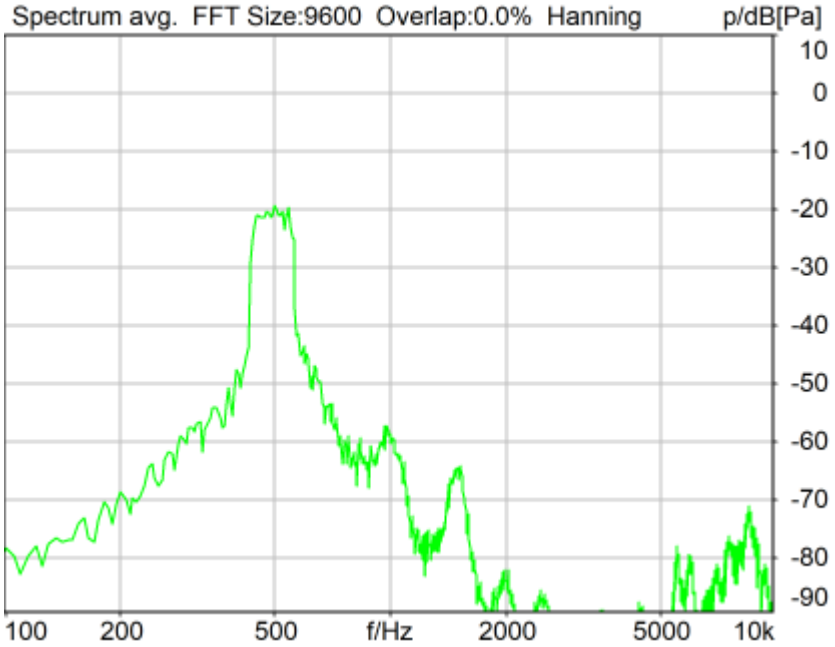
Distortion (Noise) RCV (packed): 31.51 dB (2.66%) Ok

Ok

2024/4/23 10:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



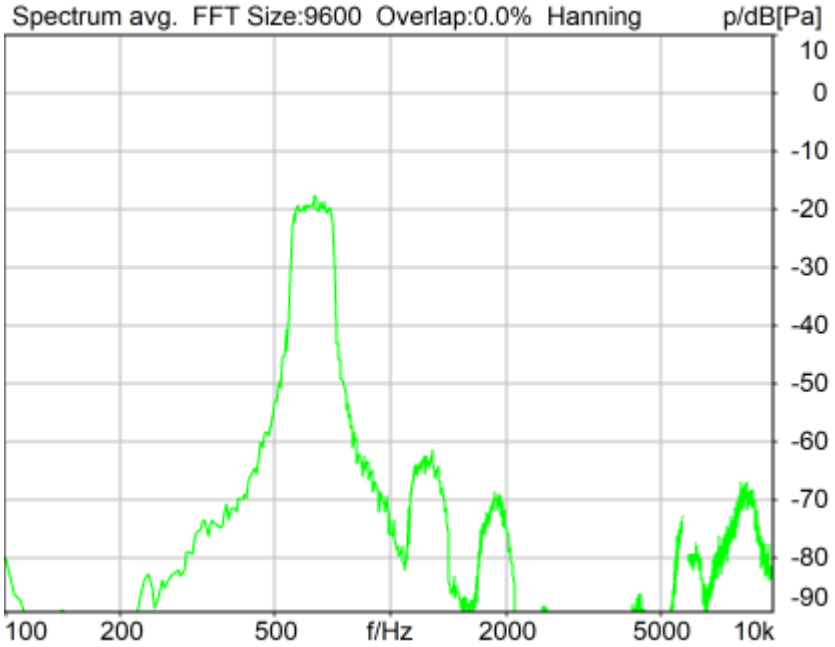
Distortion (Noise) RCV (packed): 28.63 dB (3.70%) Ok

Ok

2024/4/23 10:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



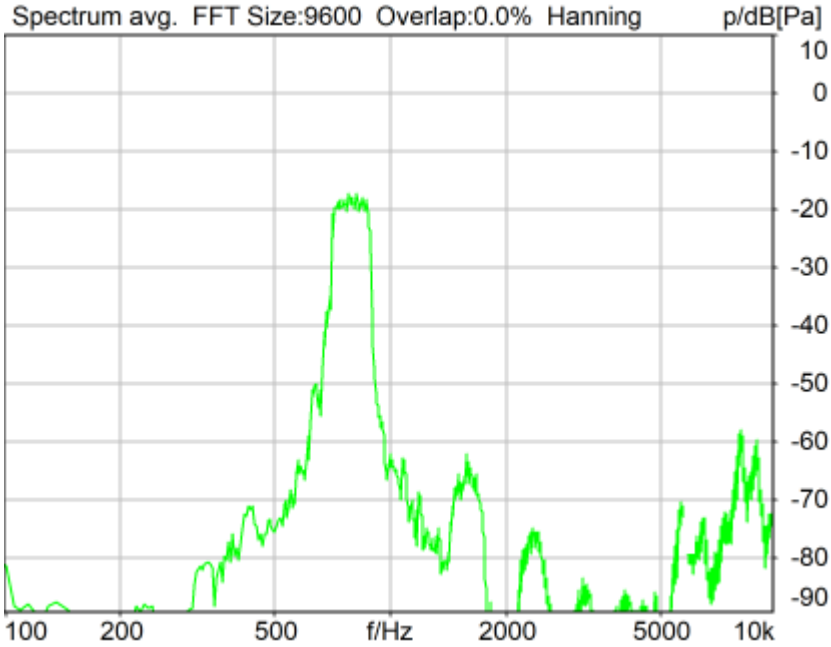
Distortion (Noise) RCV (packed): 34.48 dB (1.89%) Ok

Ok

2024/4/23 10:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



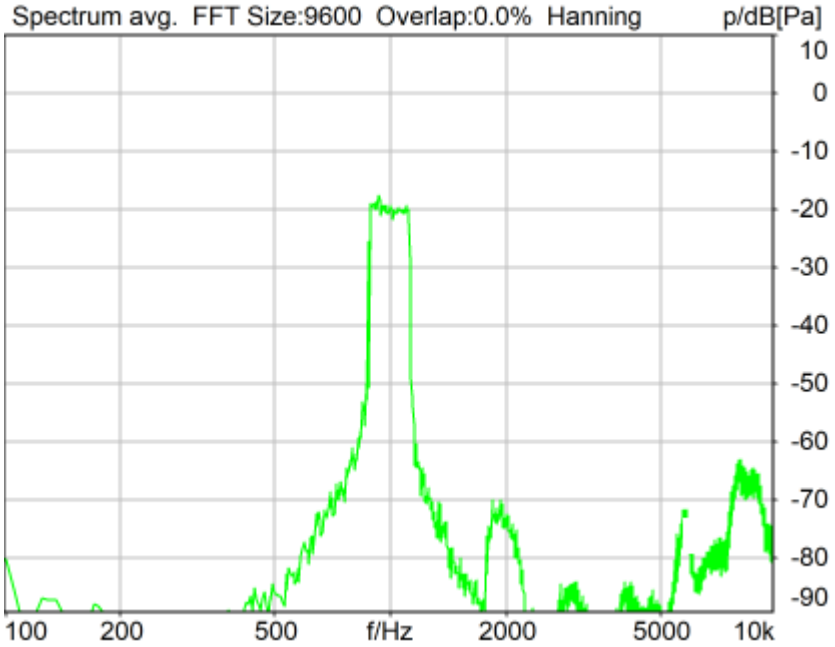
Distortion (Noise) RCV (packed): 33.74 dB (2.05%) Ok

Ok

2024/4/23 10:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



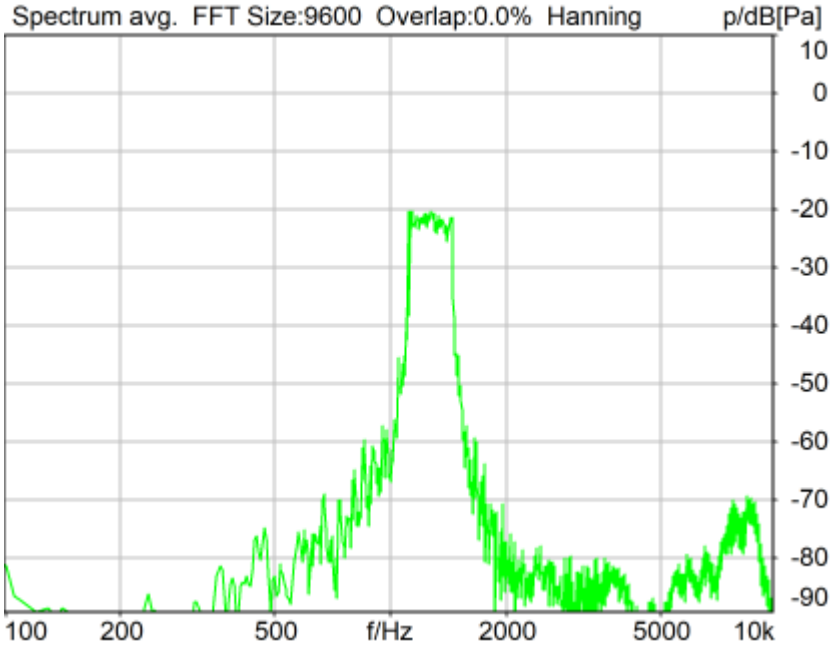
Distortion (Noise) RCV (packed): 37.95 dB (1.27%) Ok

Ok

2024/4/23 10:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



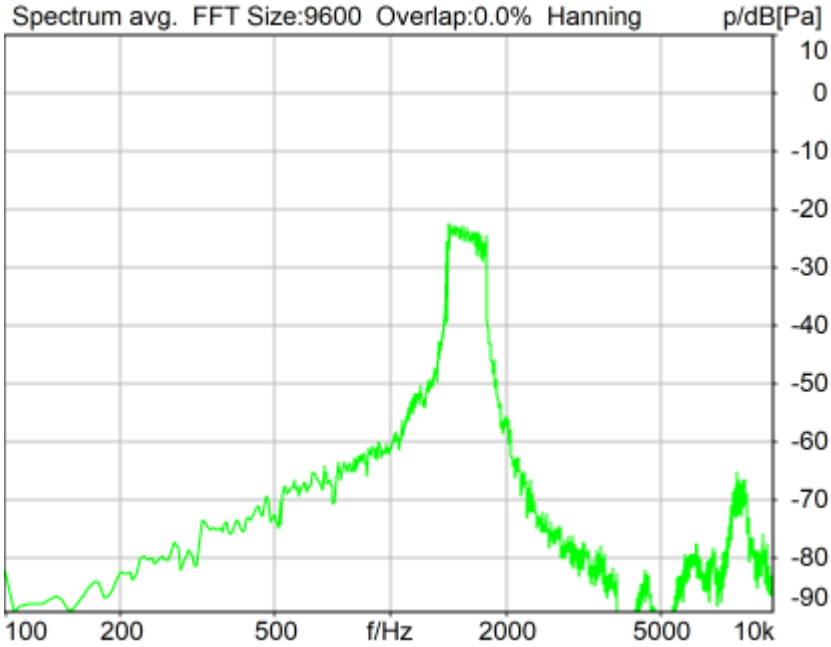
Distortion (Noise) RCV (packed): 26.27 dB (4.86%) Ok

Ok

2024/4/23 10:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



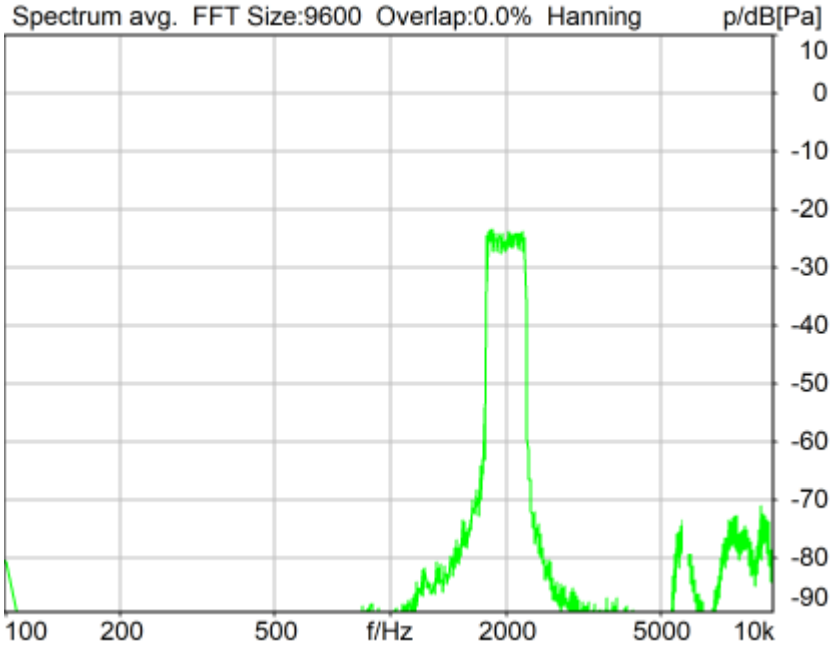
Distortion (Noise) RCV (packed): 22.65 dB (7.37%) Ok

Ok

2024/4/23 10:36 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



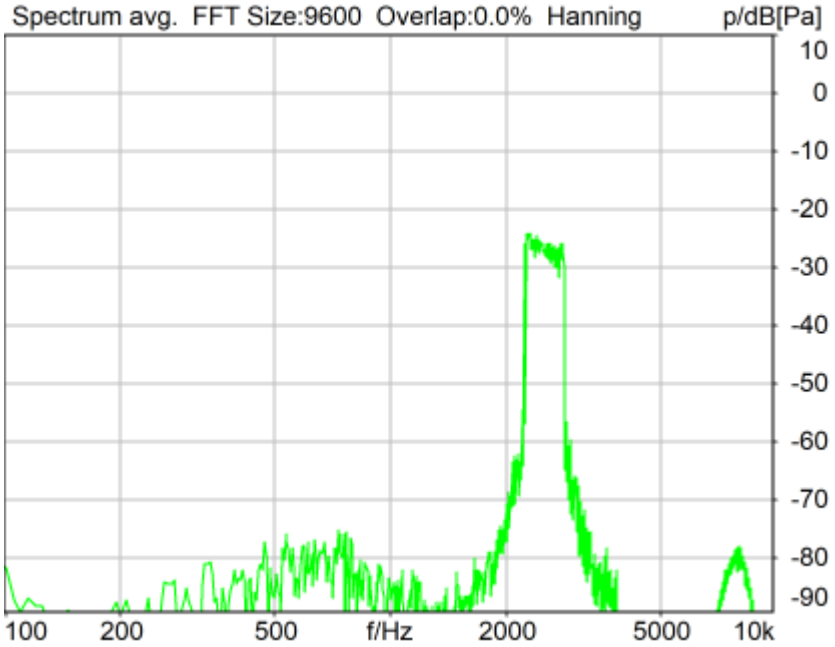
Distortion (Noise) RCV (packed): 41.55 dB (0.84%) Ok

Ok

2024/4/23 10:36 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



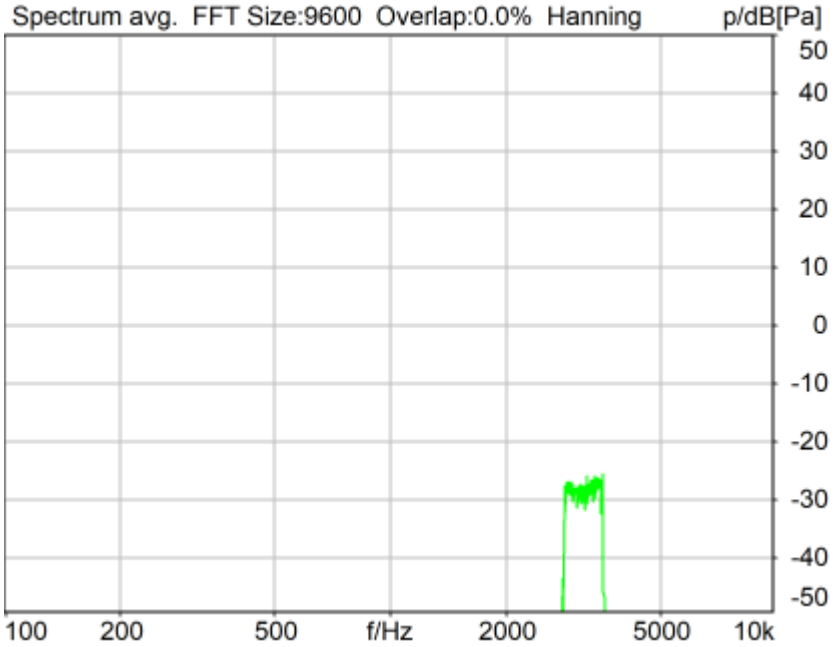
Distortion (Noise) RCV (packed): 38.40 dB (1.20%) Ok

Ok

2024/4/23 10:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 35.82 dB (1.62%) Ok

Ok

2024/4/23 10:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

Region	Frequency	SDNR
1	400Hz	31.51 dB

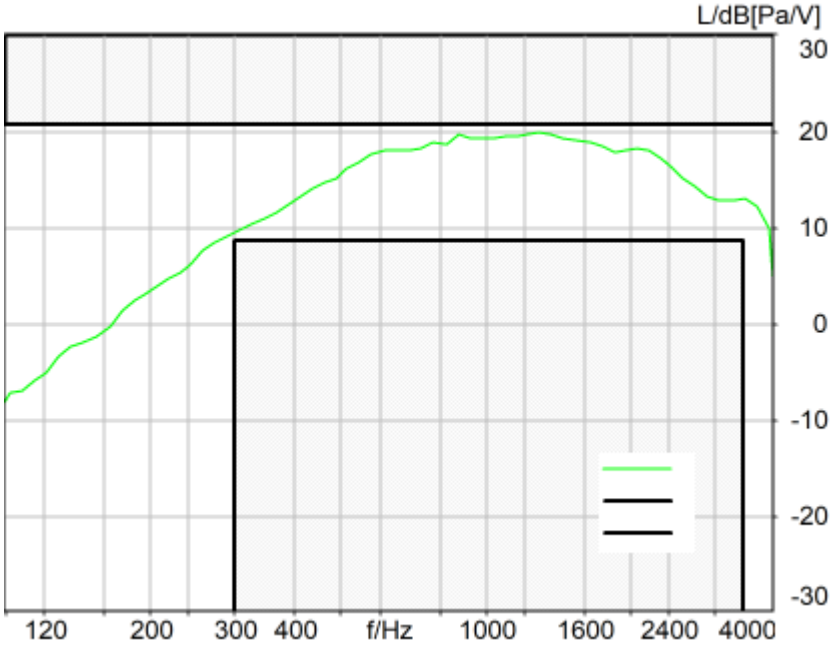
2	500Hz	28.63 dB
3	630Hz	34.48 dB
4	800Hz	33.74 dB
5	1000Hz	37.95 dB
6	1250Hz	26.27 dB
7	1600Hz	22.65 dB
8	2000Hz	41.55 dB
9	2500Hz	38.40 dB
10	3150Hz	35.82 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.65dB at 1600Hz.

2024/4/23 10:37 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



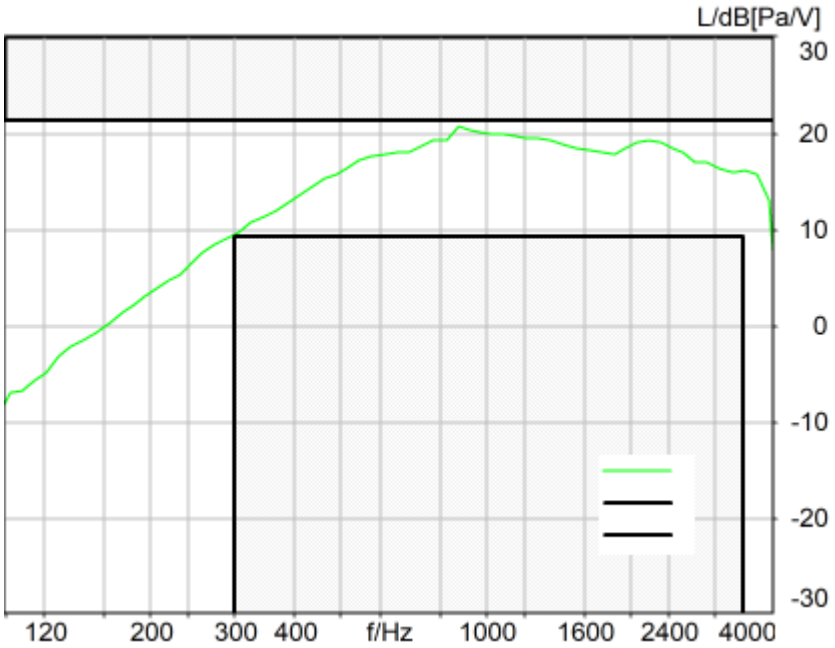
Absolute minimal distance
0.91 dB at 1285.9 Hz Ok

Ok

2024/4/2 17:22 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



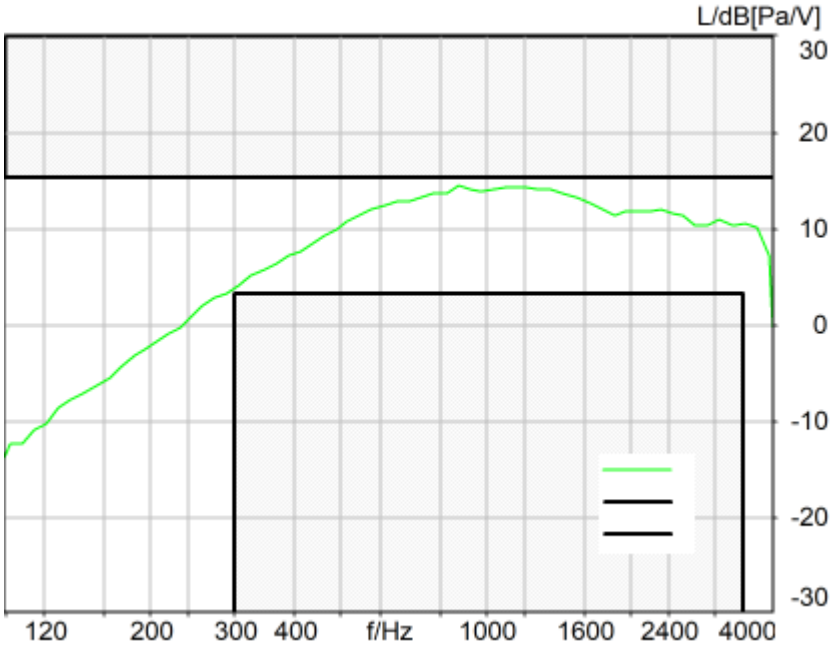
Absolute minimal distance
0.49 dB at 873.9 Hz Ok

Ok

2024/4/2 17:22 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



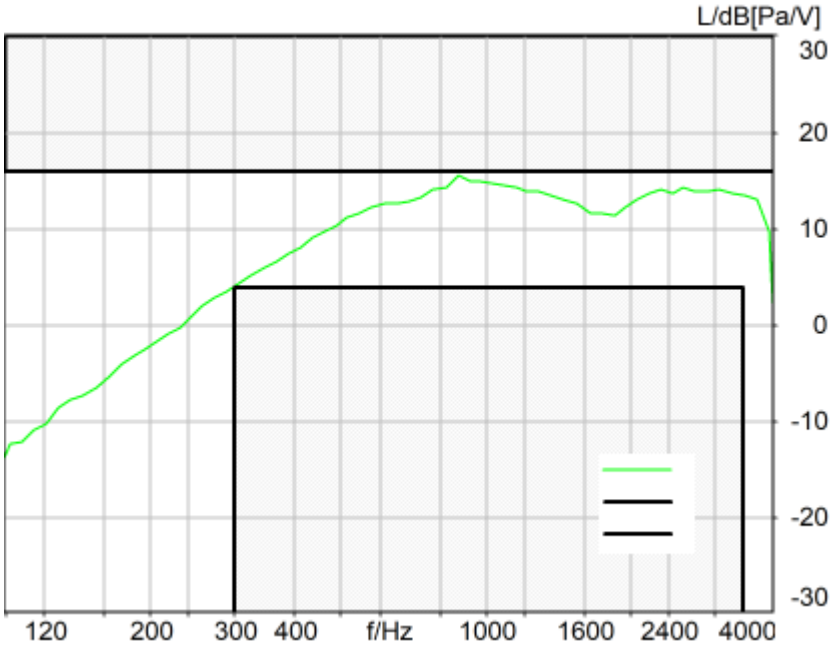
Absolute minimal distance
0.78 dB at 873.9 Hz Ok

Ok

2024/4/23 10:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.41 dB at 873.9 Hz Ok

Ok

2024/4/23 10:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

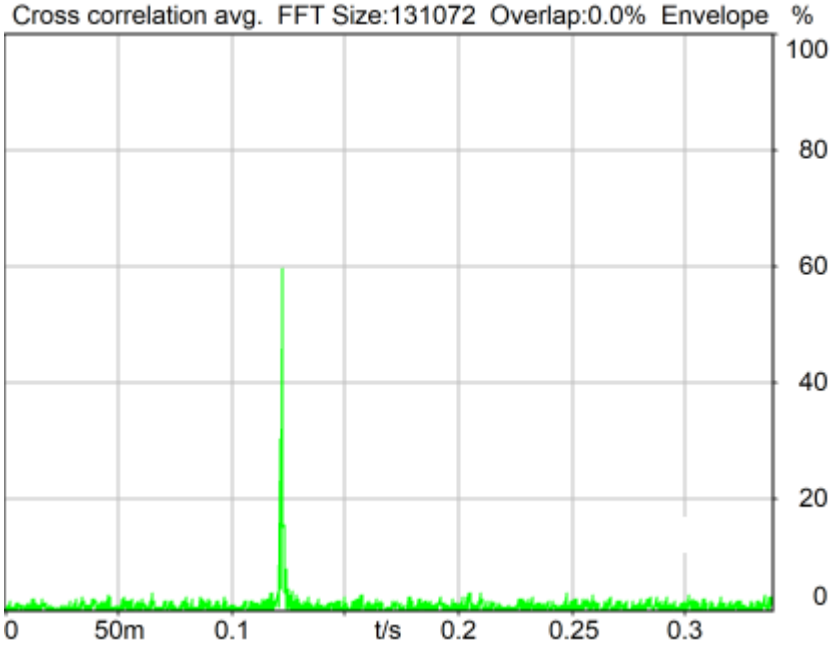
Measurement Object	WIFI 5.5G_802.11a 6M_EVS WB 128kbps_CH132
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/27 12:09
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

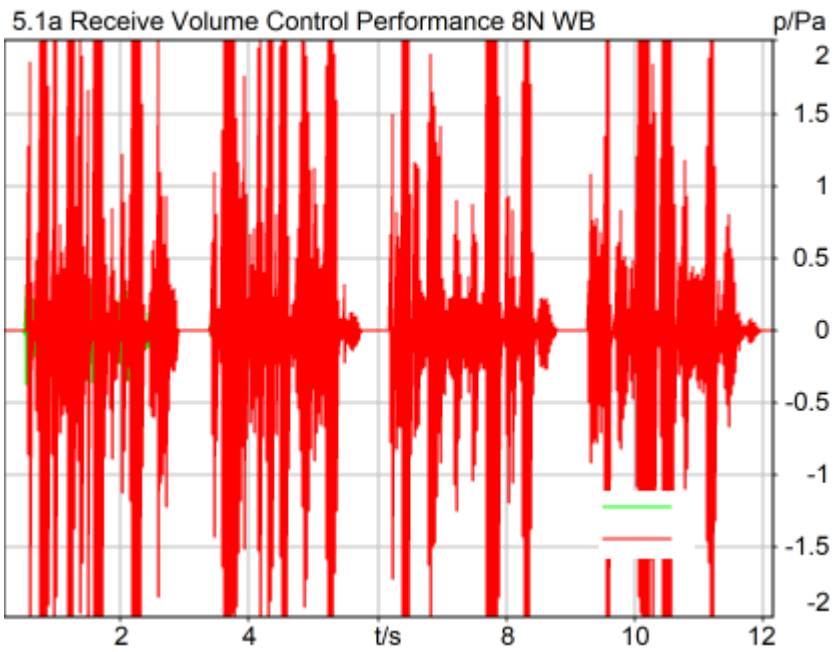


Delay (Cross): 122.2 ms

2024/4/2 17:23 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

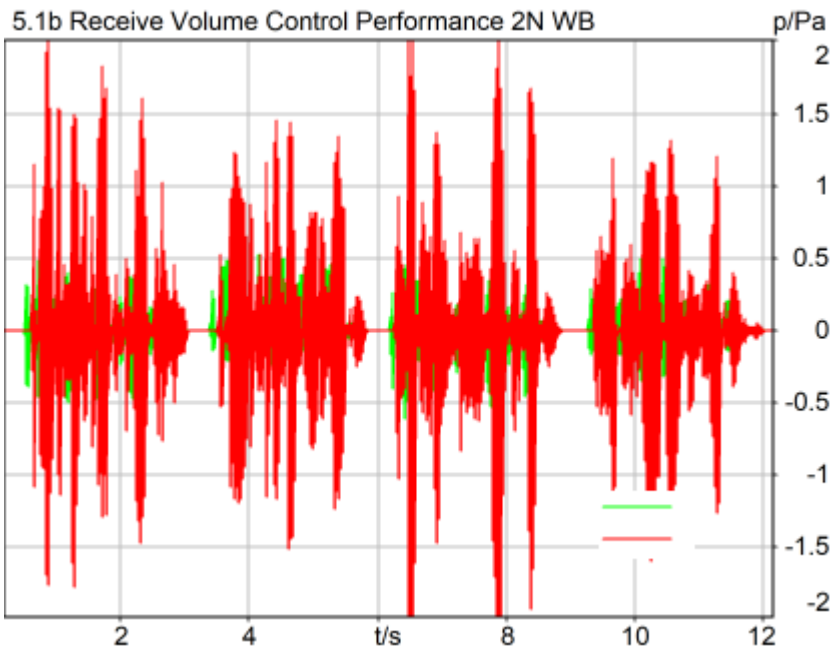
Speech Level RCV: 87.20 dB[SPL], Act.: 80.79%
Corrected Speech Level: 17.20 dB[SPL] Ok

Ok

2024/4/2 17:23 ACQUA 5.1.200

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

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



Correction

X - 70

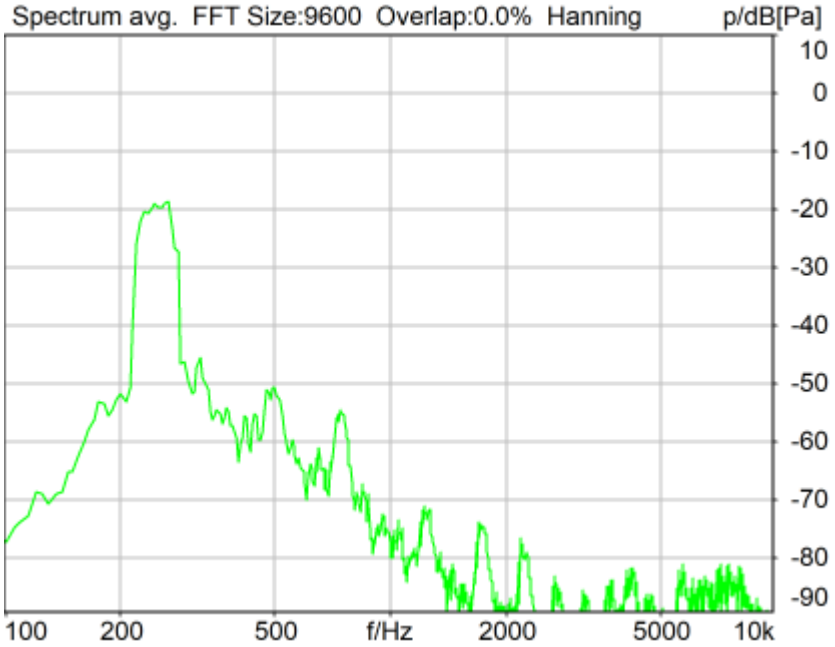
Channel	Speech level	Activity	Corrected speech level	
RCV	80.85 dB[SPL]	83.17%	10.85 dB[SPL]	Ok

Ok

2024/4/23 10:40 ACQUA 6.0.200

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

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



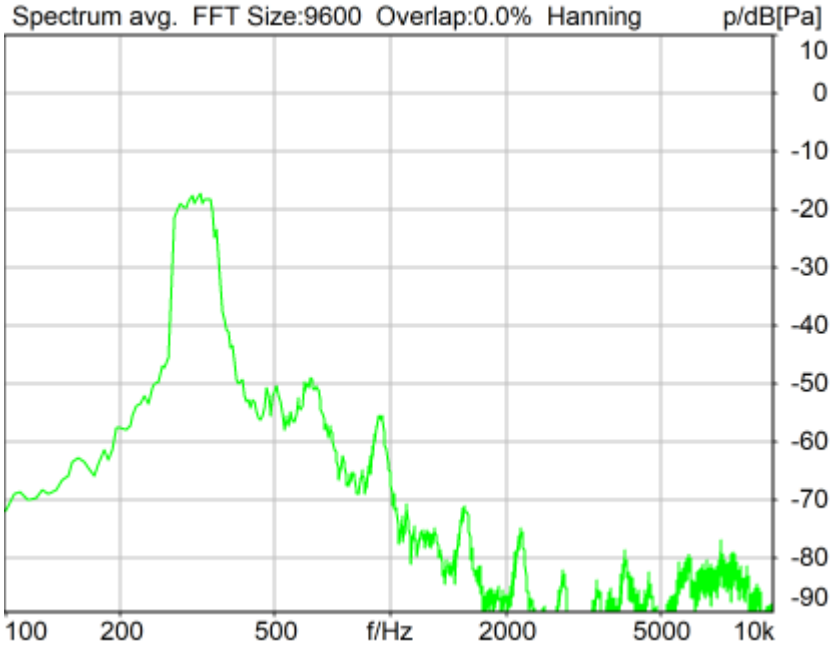
Distortion (Noise) RCV (packed): 30.02 dB (3.15%) Ok

Ok

2024/4/2 17:24 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



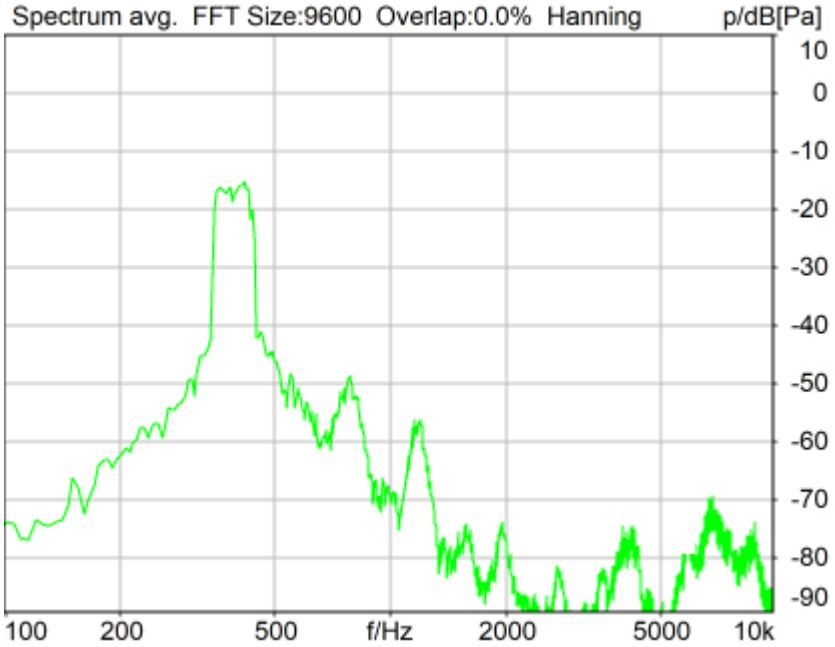
Distortion (Noise) RCV (packed): 29.55 dB (3.33%) Ok

Ok

2024/4/2 17:24 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): 30.09 dB (3.13%) Ok

Ok

2024/4/2 17:25 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

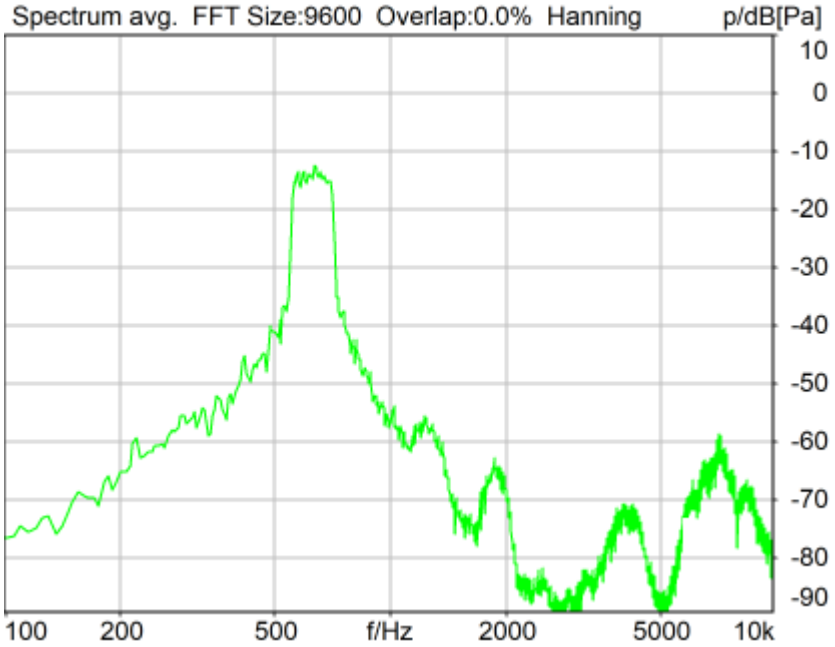
Distortion (Noise) RCV (packed): 29.02 dB (3.54%) Ok

Ok

2024/4/2 17:25 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



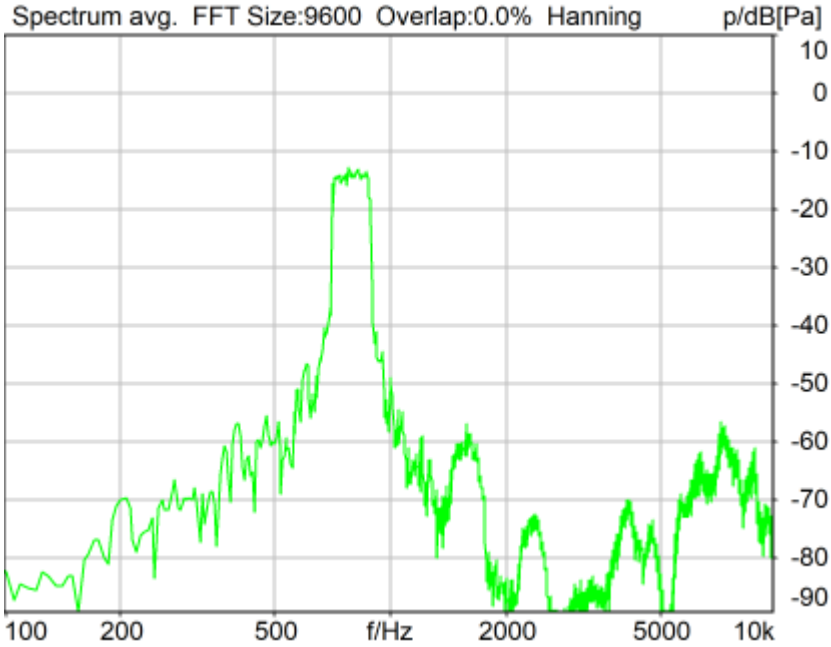
Distortion (Noise) RCV (packed): 27.82 dB (4.06%) Ok

Ok

2024/4/2 17:26 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



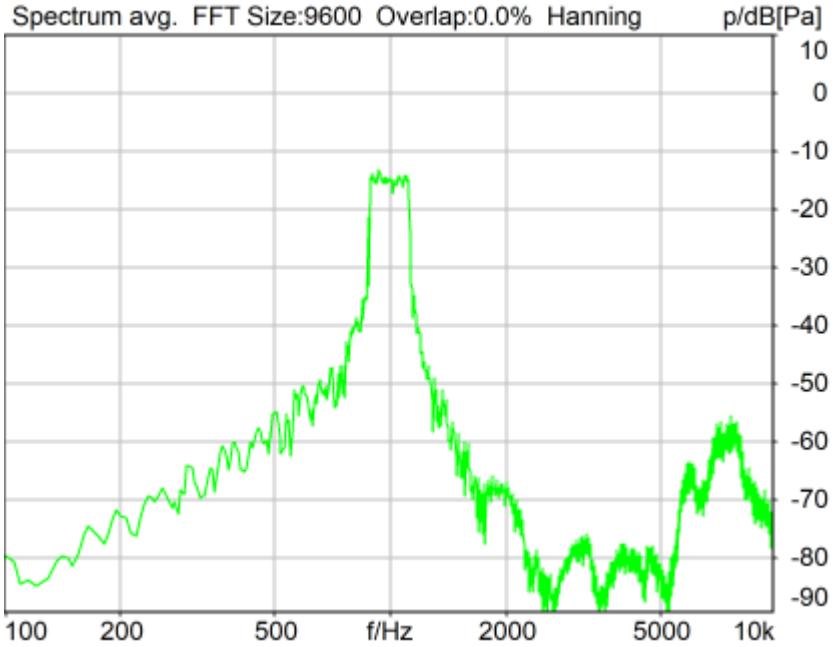
Distortion (Noise) RCV (packed): 32.80 dB (2.29%) Ok

Ok

2024/4/2 17:26 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



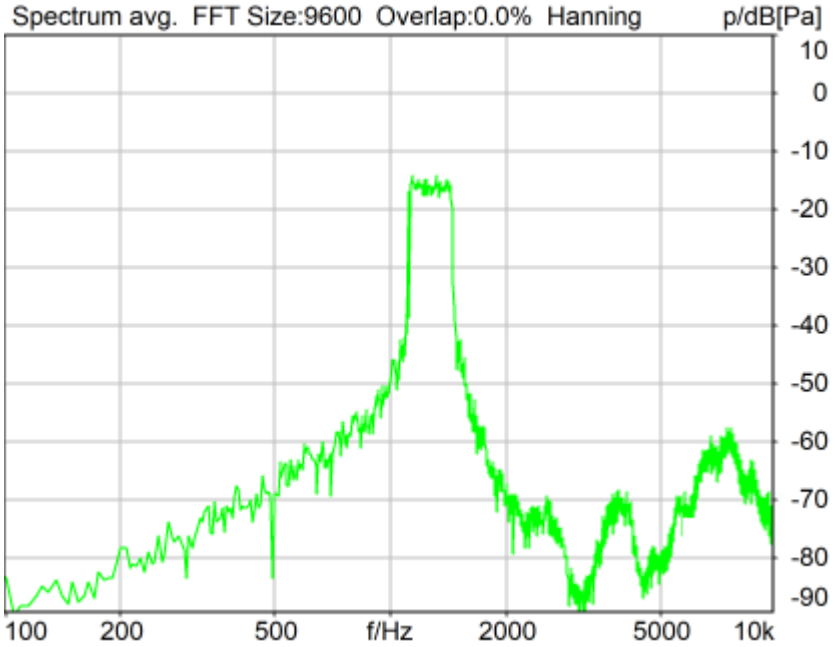
Distortion (Noise) RCV (packed): 26.98 dB (4.48%) Ok

Ok

2024/4/2 17:26 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



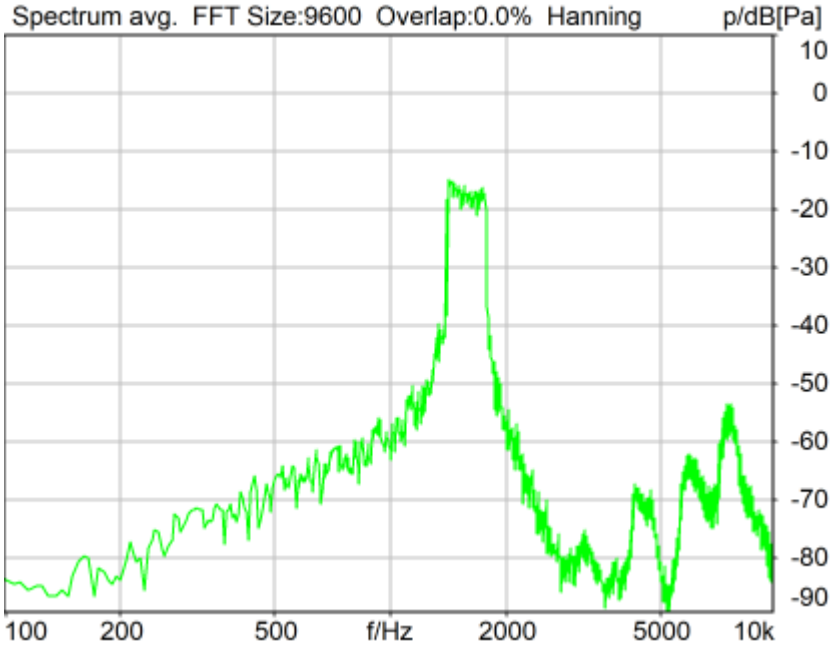
Distortion (Noise) RCV (packed): 27.51 dB (4.21%) Ok

Ok

2024/4/2 17:27 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



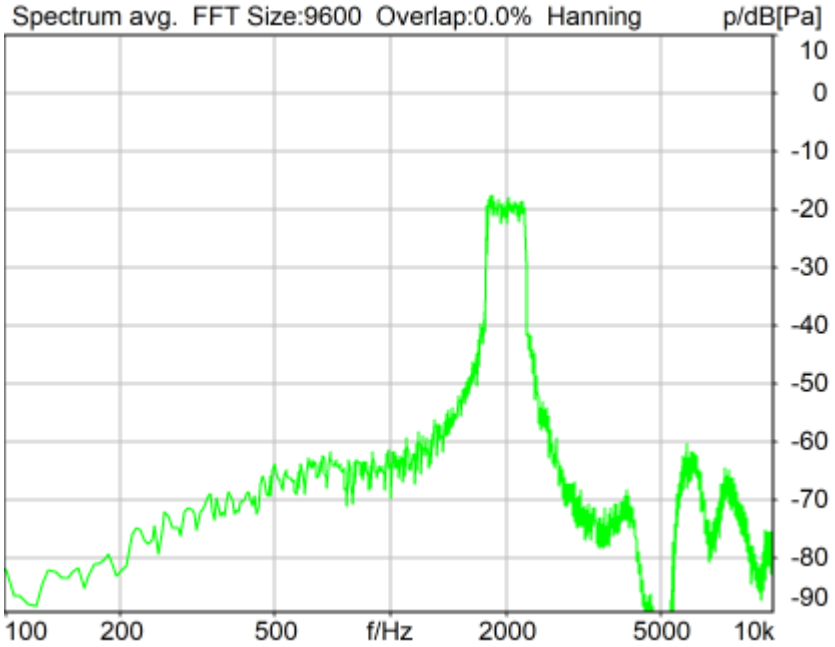
Distortion (Noise) RCV (packed): 28.10 dB (3.94%) Ok

Ok

2024/4/2 17:27 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



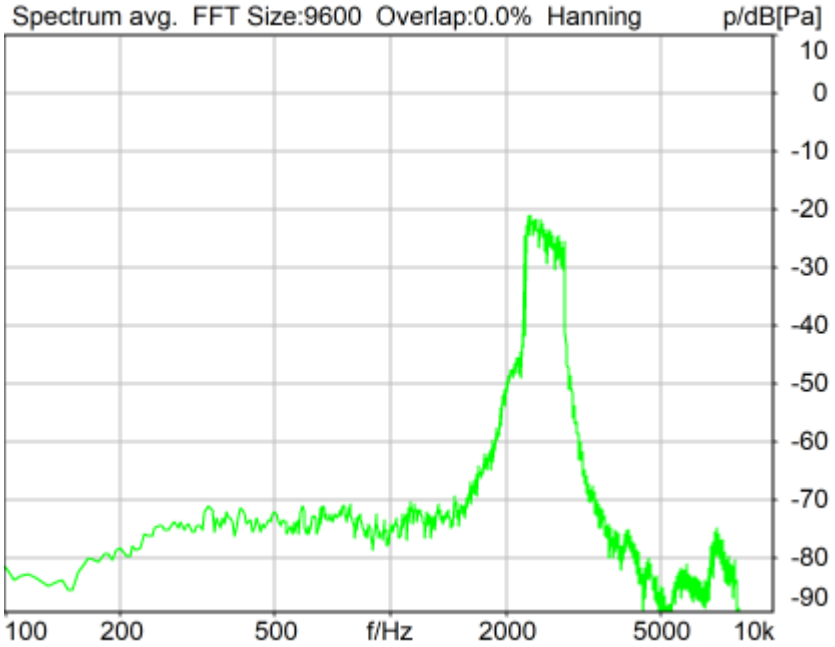
Distortion (Noise) RCV (packed): 25.72 dB (5.18%) Ok

Ok

2024/4/2 17:28 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



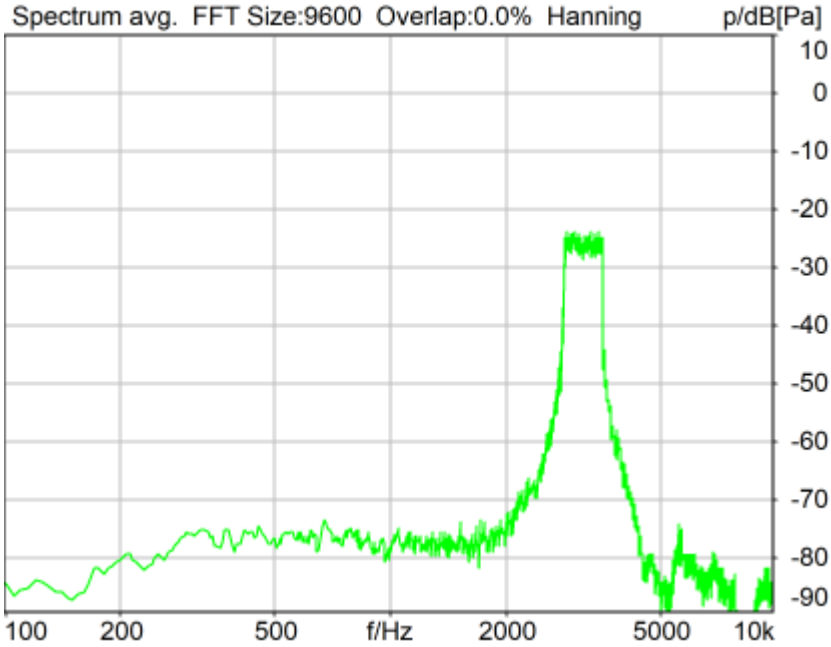
Distortion (Noise) RCV (packed): 23.96 dB (6.34%) Ok

Ok

2024/4/2 17:30 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



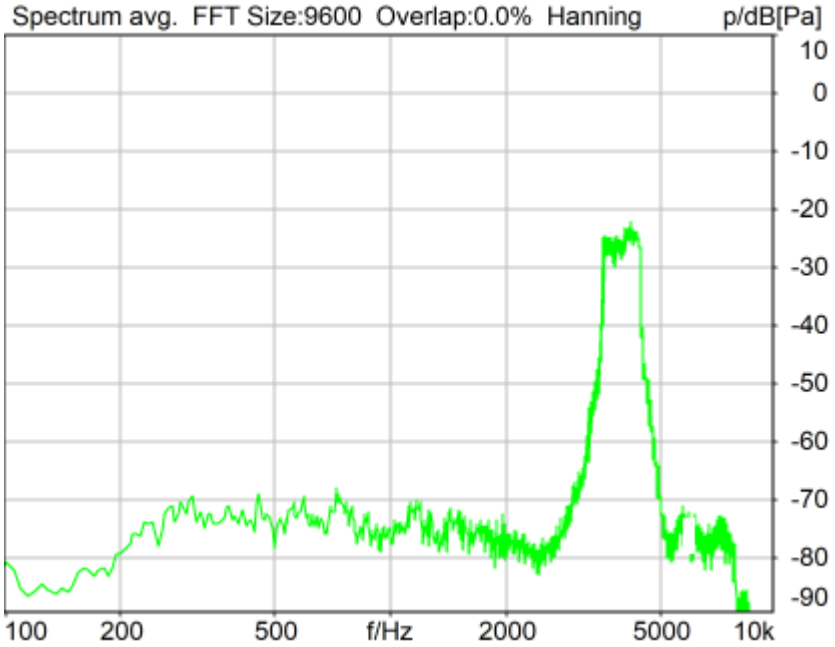
Distortion (Noise) RCV (packed): 27.40 dB (4.27%) Ok

Ok

2024/4/2 17:30 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



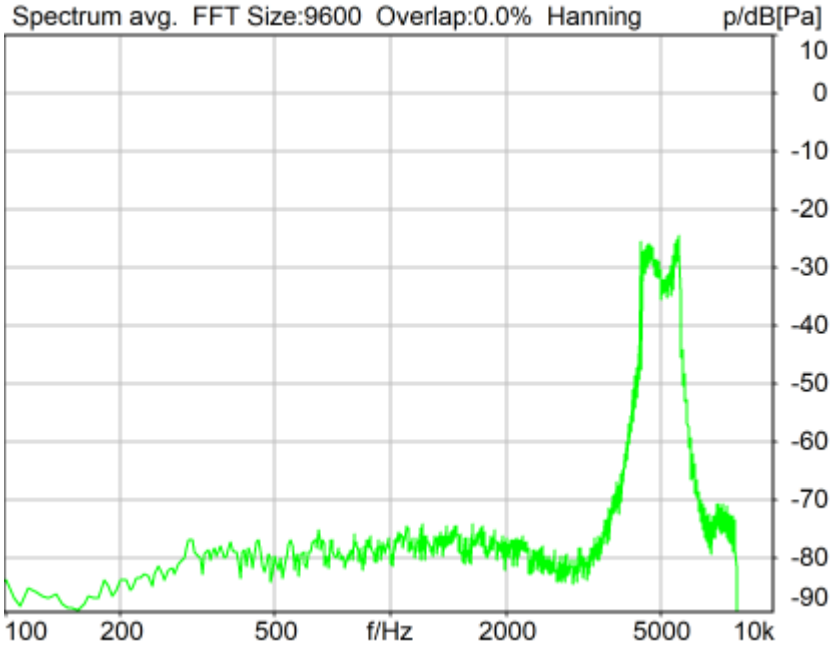
Distortion (Noise) RCV (packed): 25.61 dB (5.24%) Ok

Ok

2024/4/2 17:30 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): 23.35 dB (6.80%) Ok

Ok

2024/4/2 17:31 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

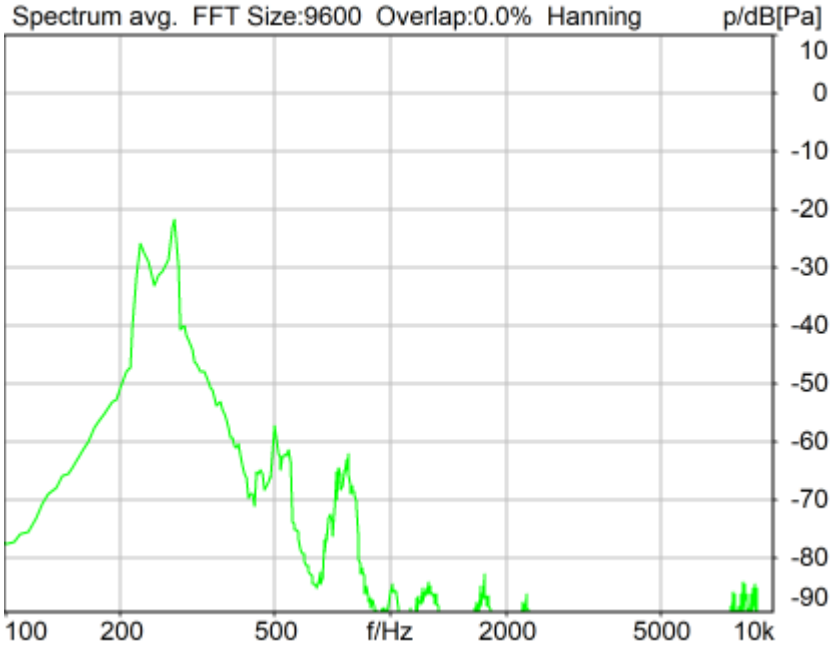
Region	Frequency	SDNR
1	250Hz	30.02 dB
2	315Hz	29.55 dB
3	400Hz	30.09 dB
4	500Hz	29.02 dB
5	630Hz	27.82 dB
6	800Hz	32.80 dB
7	1000Hz	26.98 dB
8	1250Hz	27.51 dB
9	1600Hz	28.10 dB
10	2000Hz	25.72 dB
11	2500Hz	23.96 dB
12	3150Hz	27.40 dB
13	4000Hz	25.61 dB
14	5000Hz	23.35 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.35dB at 5000Hz.

2024/4/2 17:31 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



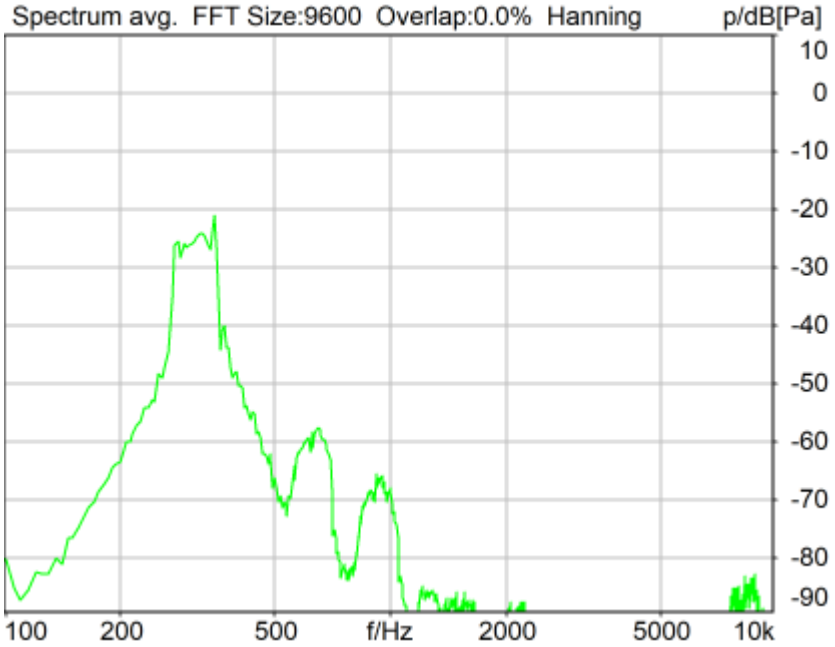
Distortion (Noise) RCV (packed): 28.10 dB (3.94%) Ok

Ok

2024/4/23 10:42 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



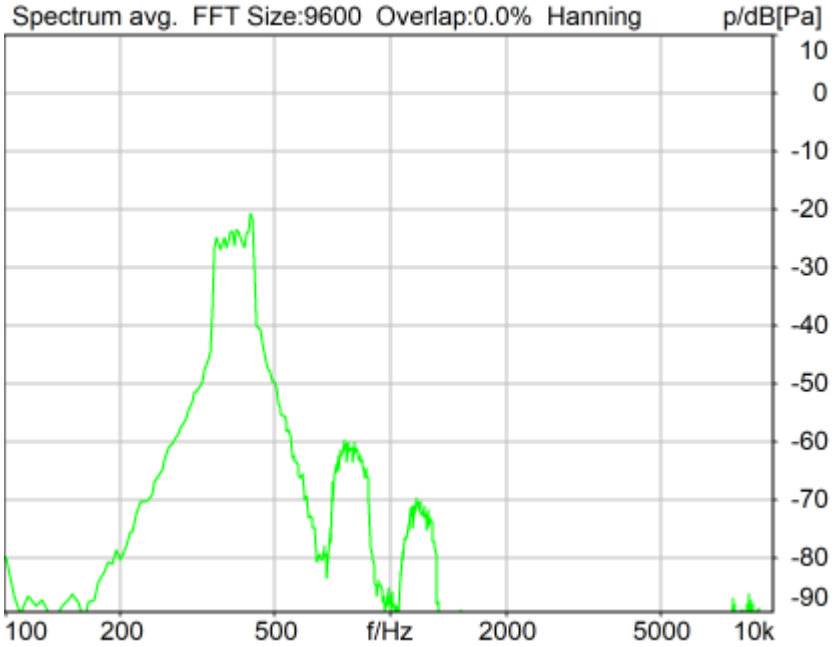
Distortion (Noise) RCV (packed): 29.77 dB (3.25%) Ok

Ok

2024/4/23 10:42 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



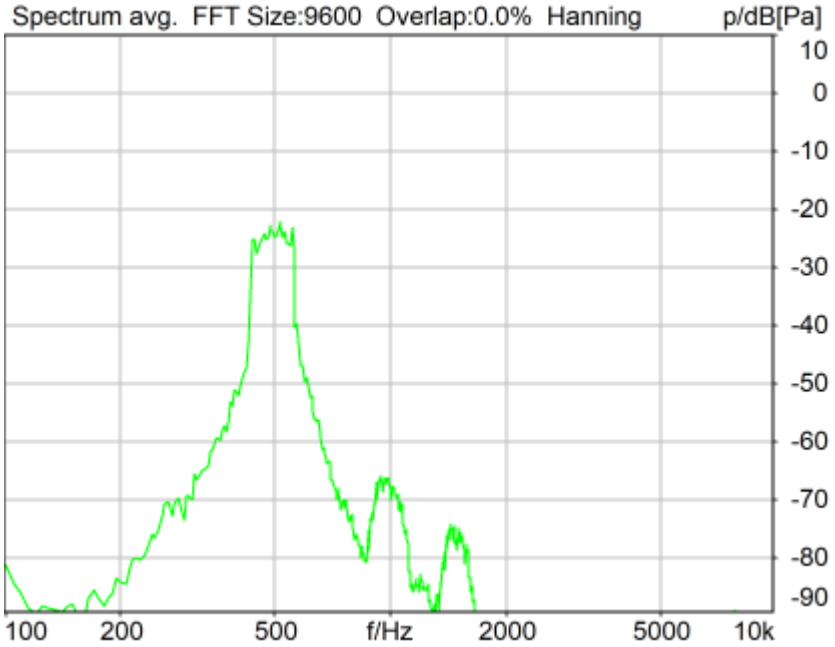
Distortion (Noise) RCV (packed): 30.32 dB (3.05%) Ok

Ok

2024/4/23 10:43 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



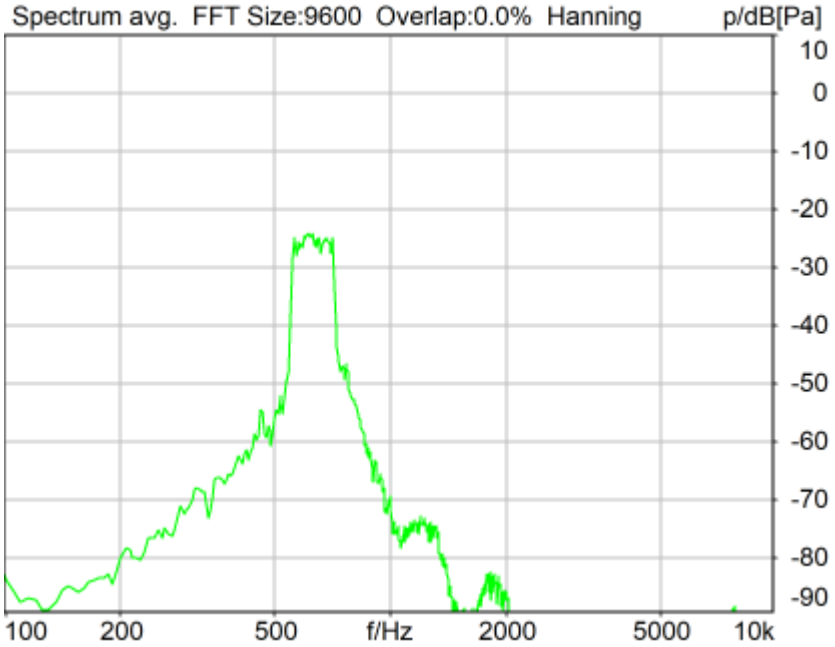
Distortion (Noise) RCV (packed): 31.30 dB (2.72%) Ok

Ok

2024/4/23 10:43 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



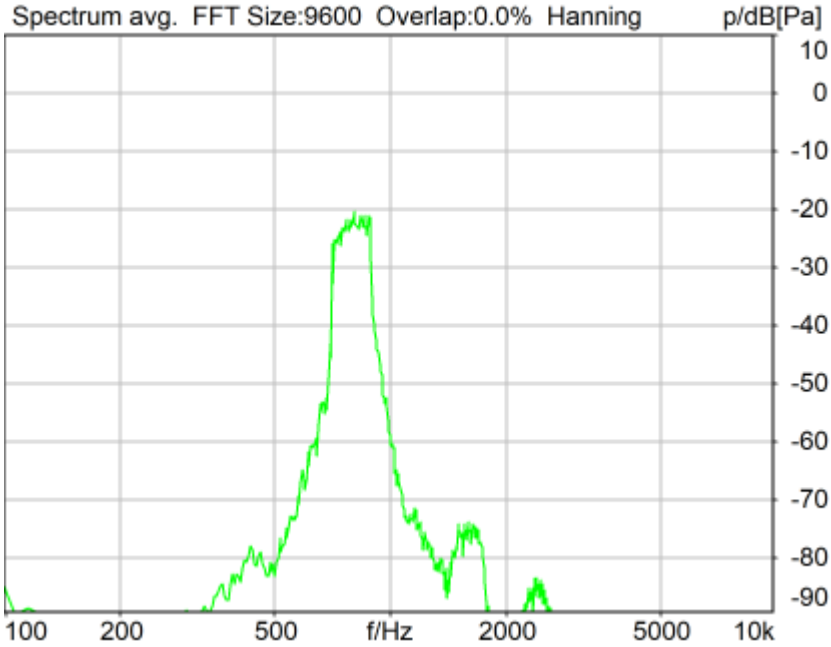
Distortion (Noise) RCV (packed): 27.53 dB (4.20%) Ok

Ok

2024/4/23 10:44 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



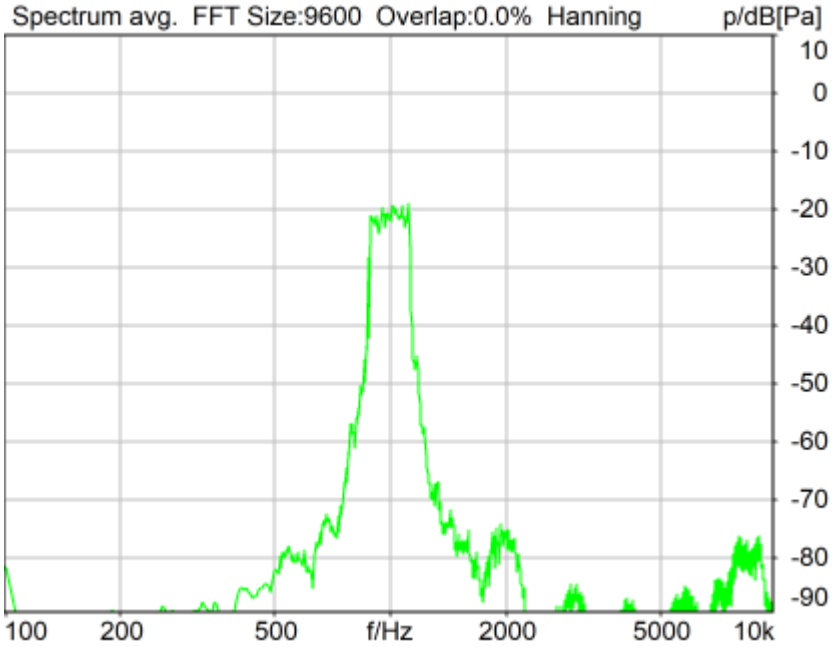
Distortion (Noise) RCV (packed): 30.46 dB (3.00%) Ok

Ok

2024/4/23 10:44 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



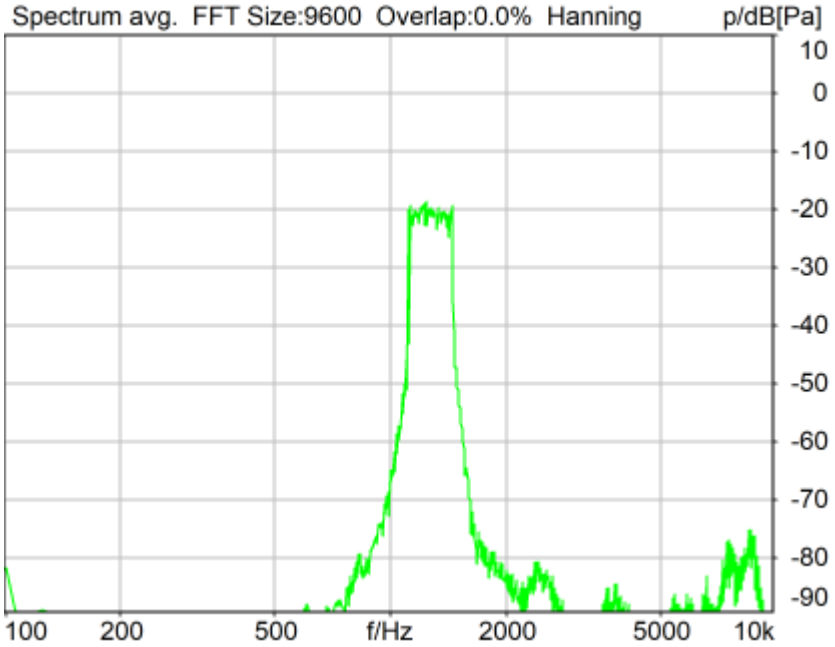
Distortion (Noise) RCV (packed): 32.57 dB (2.35%) Ok

Ok

2024/4/23 10:44 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



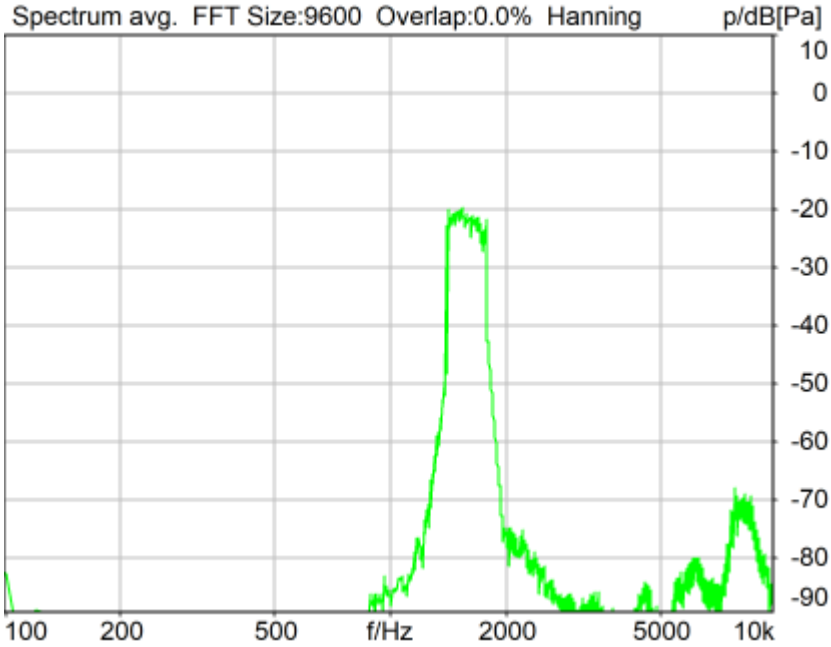
Distortion (Noise) RCV (packed): 29.68 dB (3.28%) Ok

Ok

2024/4/23 10:45 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



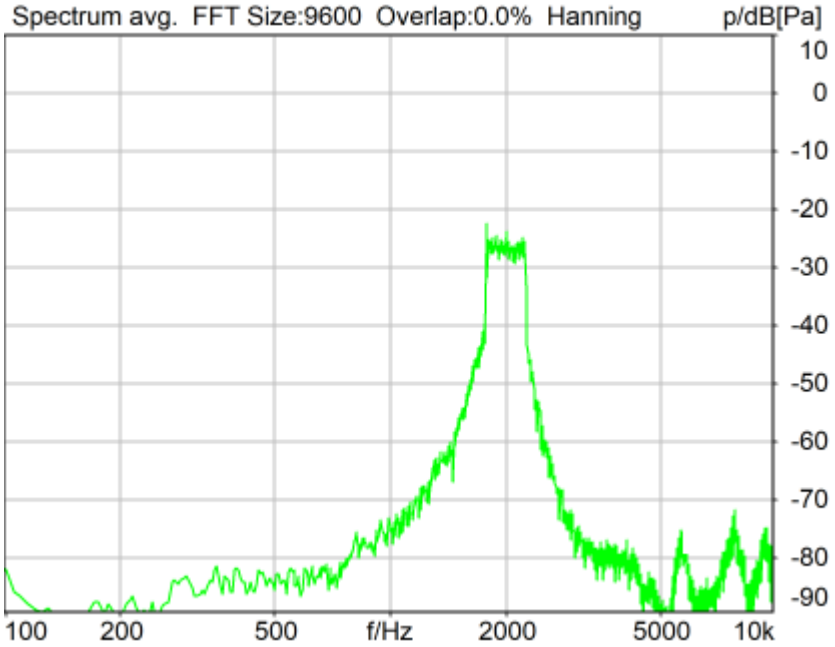
Distortion (Noise) RCV (packed): 36.27 dB (1.54%) Ok

Ok

2024/4/23 10:45 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



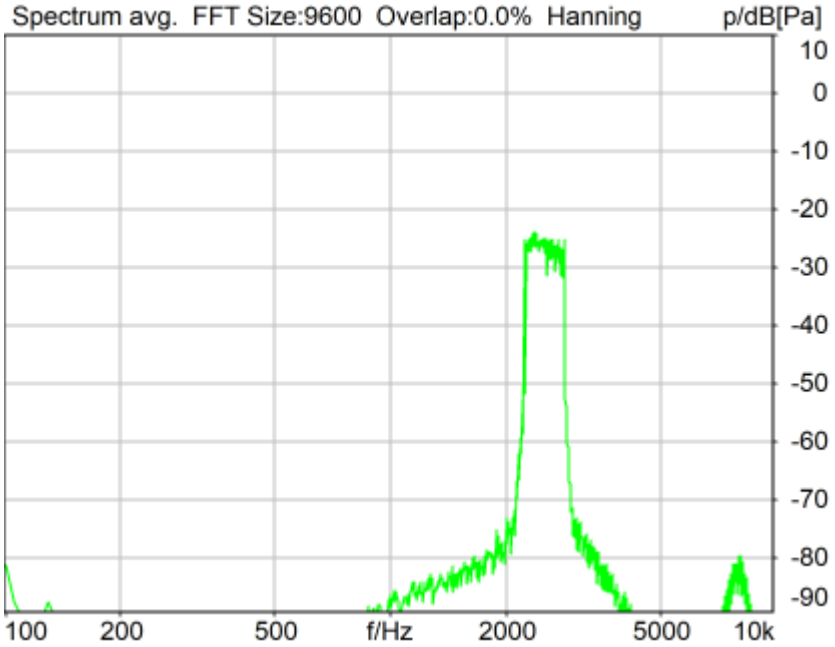
Distortion (Noise) RCV (packed): 21.33 dB (8.58%) Ok

Ok

2024/4/23 10:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



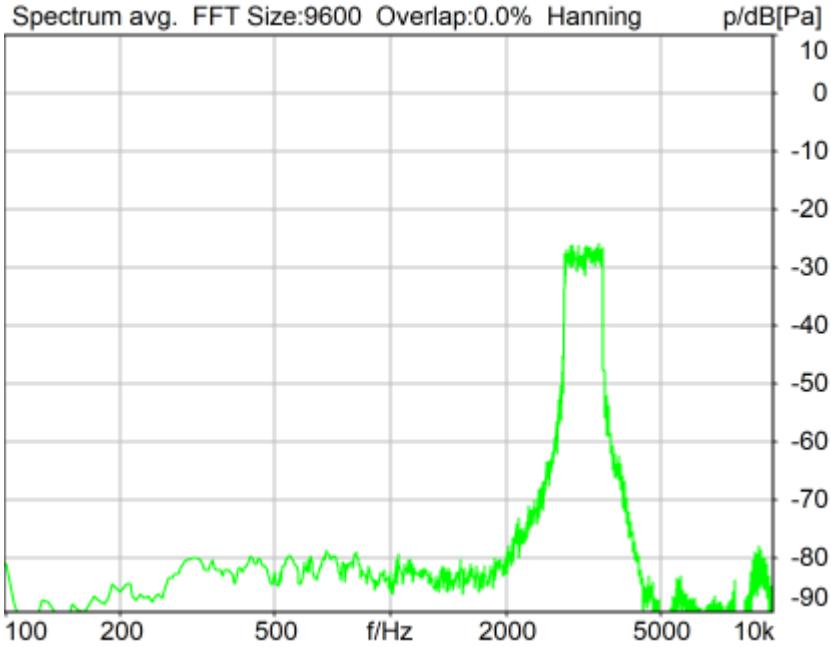
Distortion (Noise) RCV (packed): 39.07 dB (1.11%) Ok

Ok

2024/4/23 10:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



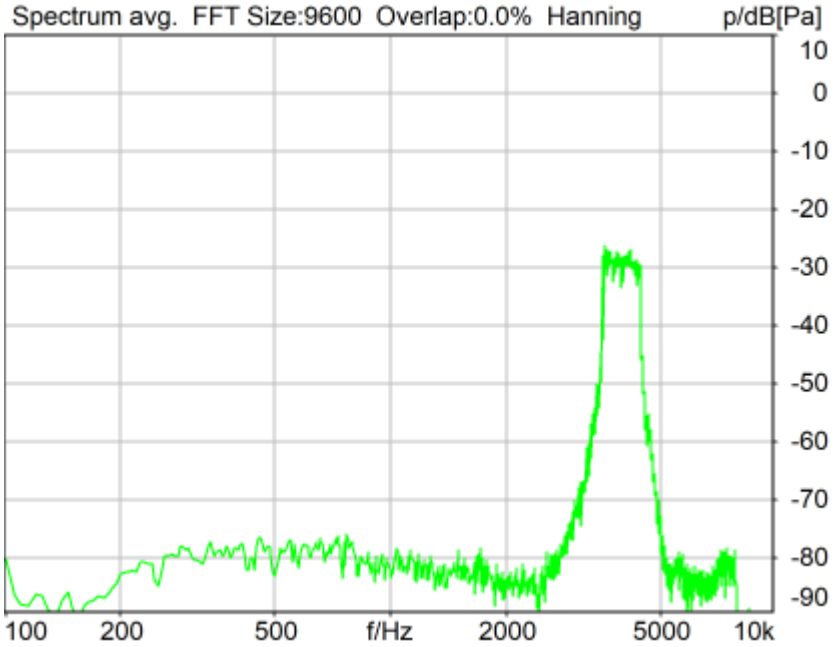
Distortion (Noise) RCV (packed): 29.58 dB (3.32%) Ok

Ok

2024/4/23 10:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



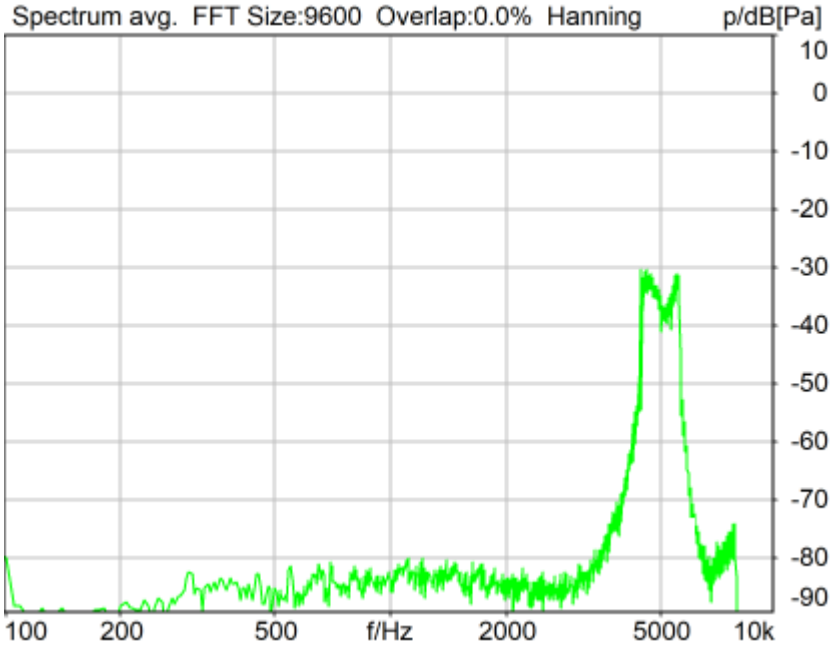
Distortion (Noise) RCV (packed): 26.50 dB (4.73%) Ok

Ok

2024/4/23 10:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 25.42 dB (5.36%) Ok

Ok

2024/4/23 10:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

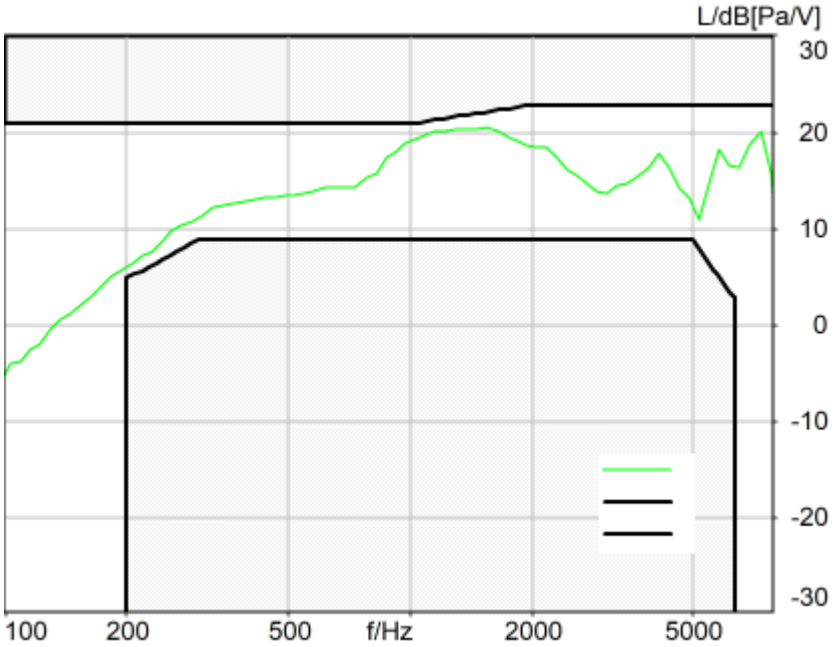
Region	Frequency	SDNR
1	250Hz	28.10 dB
2	315Hz	29.77 dB
3	400Hz	30.32 dB
4	500Hz	31.30 dB
5	630Hz	27.53 dB
6	800Hz	30.46 dB
7	1000Hz	32.57 dB
8	1250Hz	29.68 dB
9	1600Hz	36.27 dB
10	2000Hz	21.33 dB
11	2500Hz	39.07 dB
12	3150Hz	29.58 dB
13	4000Hz	26.50 dB
14	5000Hz	25.42 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.33dB at 2000Hz.

2024/4/23 10:47 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



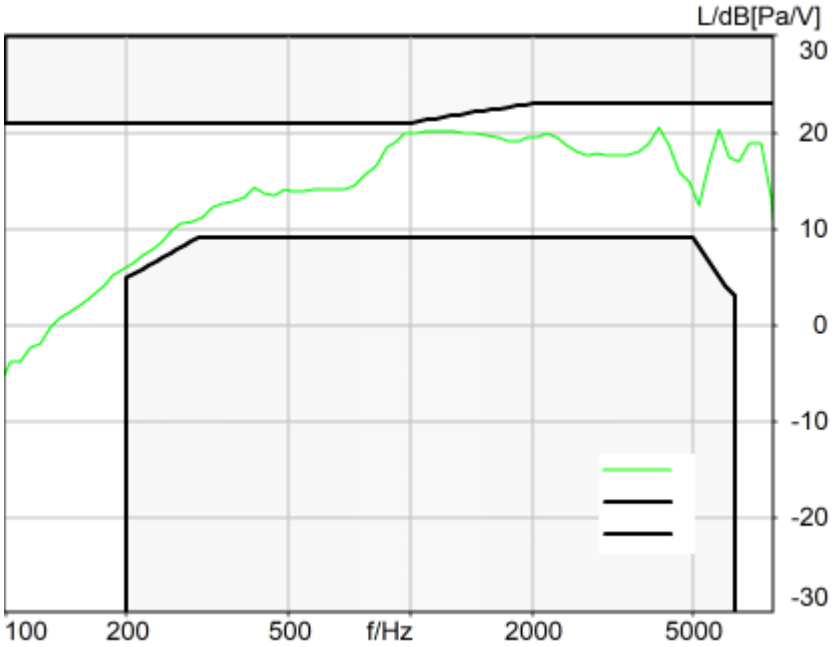
Absolute minimal distance
1.26 dB at 1151.2 Hz Ok

Ok

2024/4/2 17:31 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



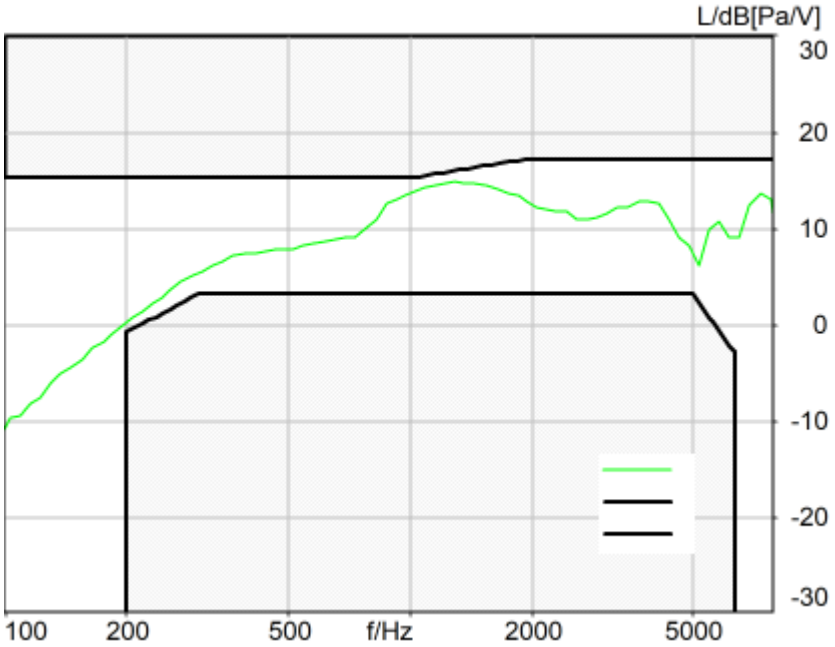
Absolute minimal distance
1.11 dB at 1028.7 Hz Ok

Ok

2024/4/2 17:31 ACQUA 5.1.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



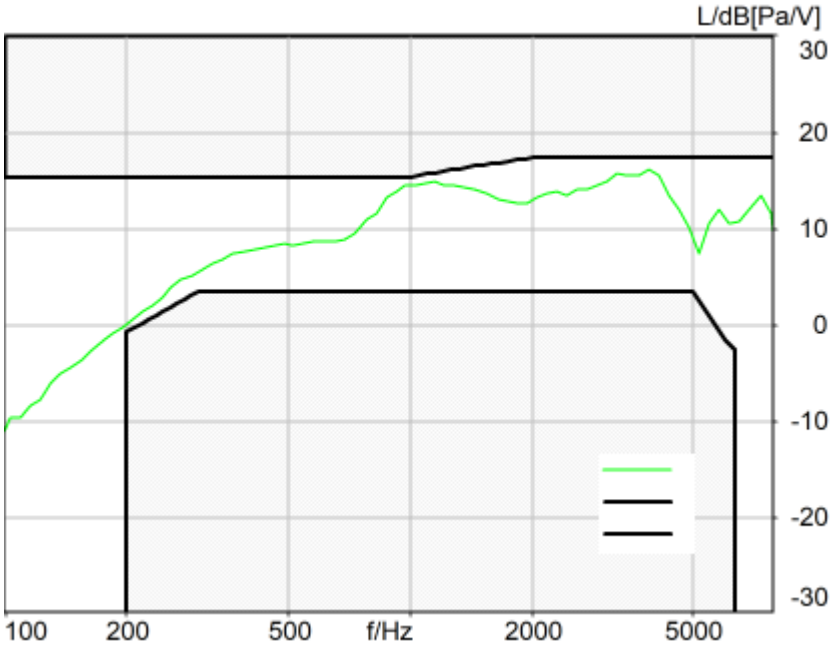
Absolute minimal distance
1.16 dB at 1285.9 Hz Ok

Ok

2024/4/23 10:41 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
0.90 dB at 1088.7 Hz Ok

Ok

2024/4/23 10:41 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

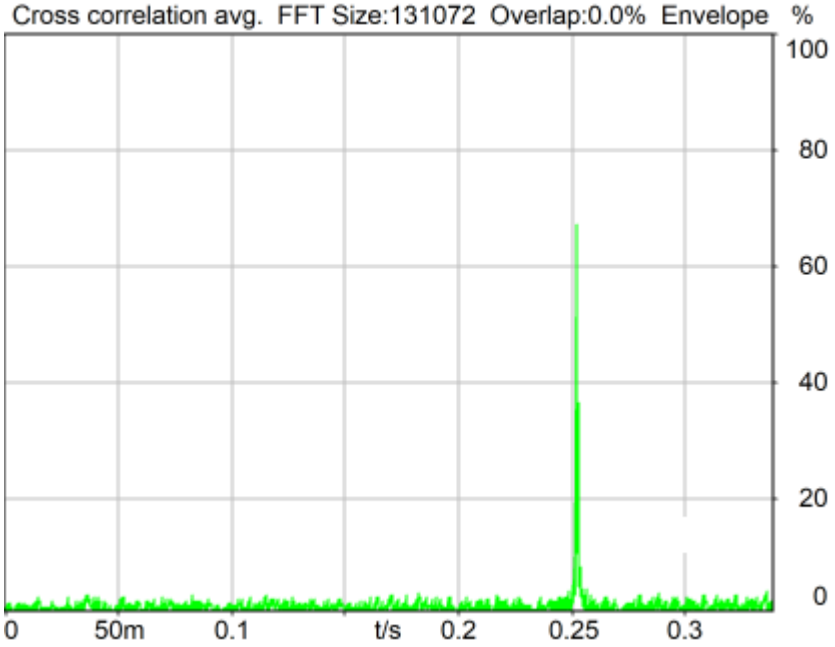
Measurement Object	WIFI 5.8G_802.11a 6M_EVS NB 24.4kbps_CH157
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/21 15:20
Responsible Person	audio

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

Overall Receive Delay NB, Index: 1

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

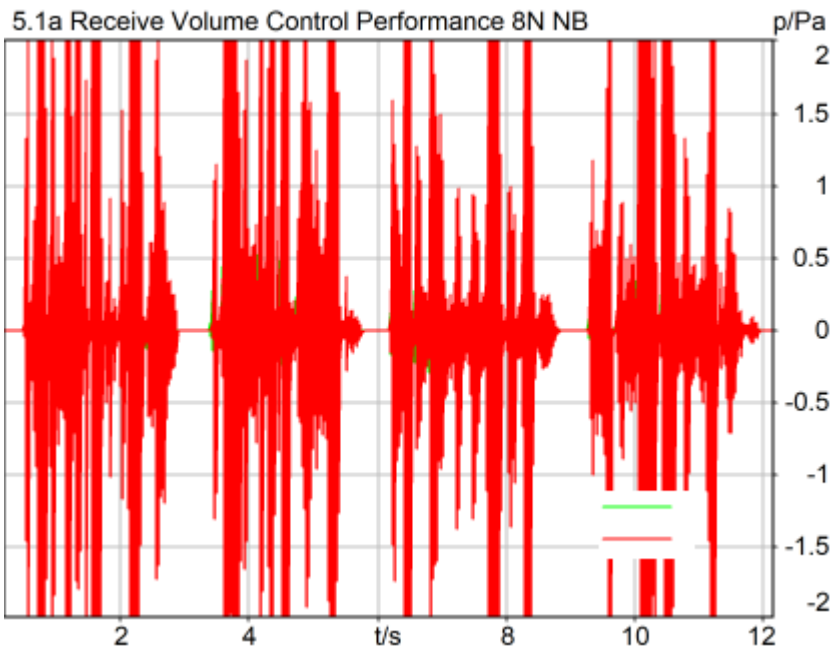


Channel	Delay
RCV*Source	252.7 ms

2024/4/19 17:04 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

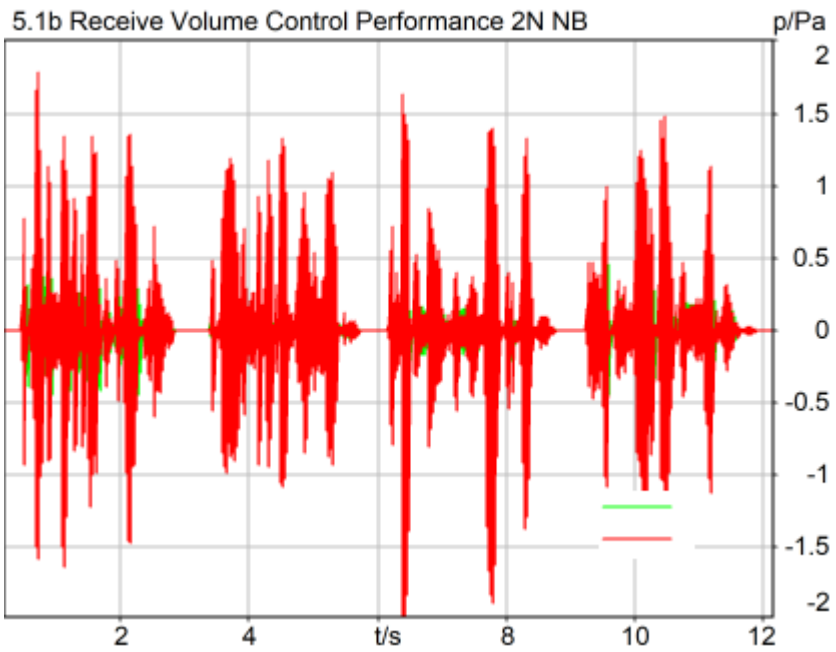
Channel	Speech level	Activity	Corrected speech level	
RCV	87.98 dB[SPL]	80.49%	17.98 dB[SPL]	Ok

Ok

2024/4/19 17:05 ACQUA 6.0.200

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

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



Correction

X - 70

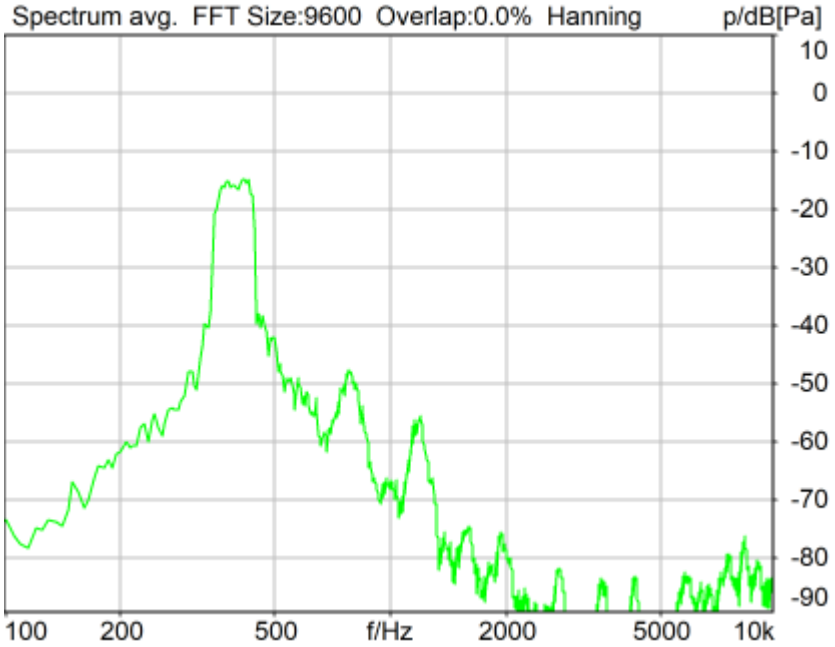
Channel	Speech level	Activity	Corrected speech level	
RCV	79.91 dB[SPL]	80.01%	9.91 dB[SPL]	Ok

Ok

2024/4/19 17:12 ACQUA 6.0.200

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

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



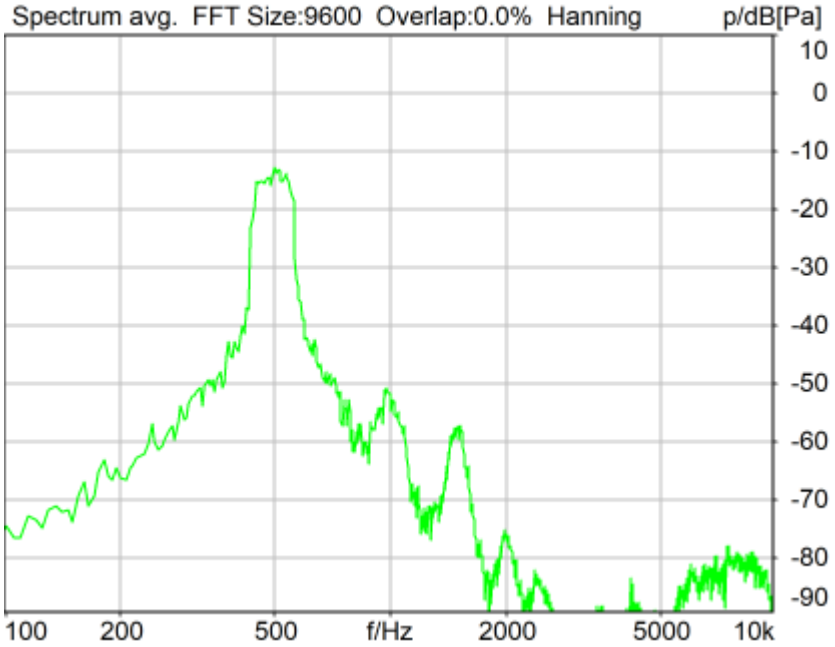
Distortion (Noise) RCV (packed): 29.48 dB (3.36%) Ok

Ok

2024/4/19 17:05 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



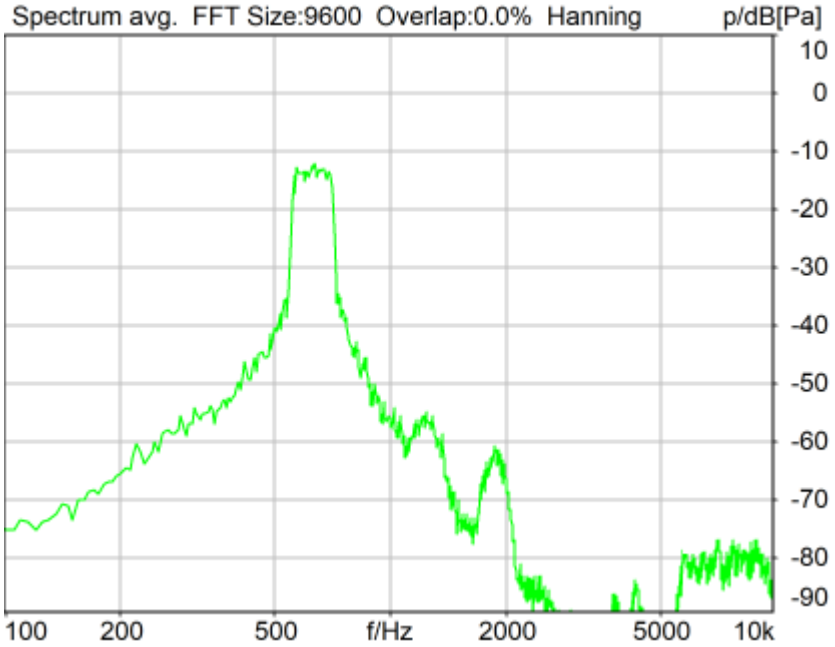
Distortion (Noise) RCV (packed): 29.91 dB (3.20%) Ok

Ok

2024/4/19 17:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



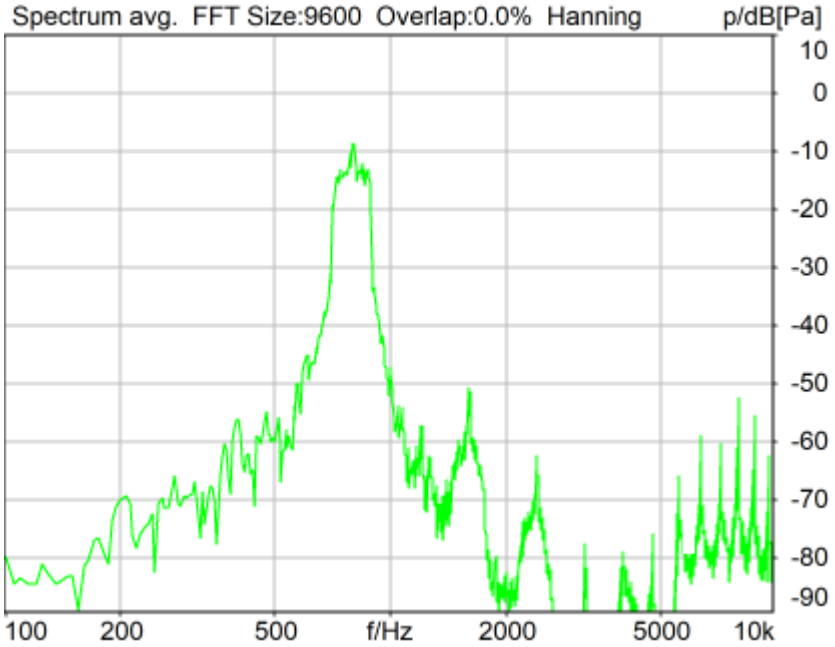
Distortion (Noise) RCV (packed): 28.68 dB (3.68%) Ok

Ok

2024/4/19 17:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



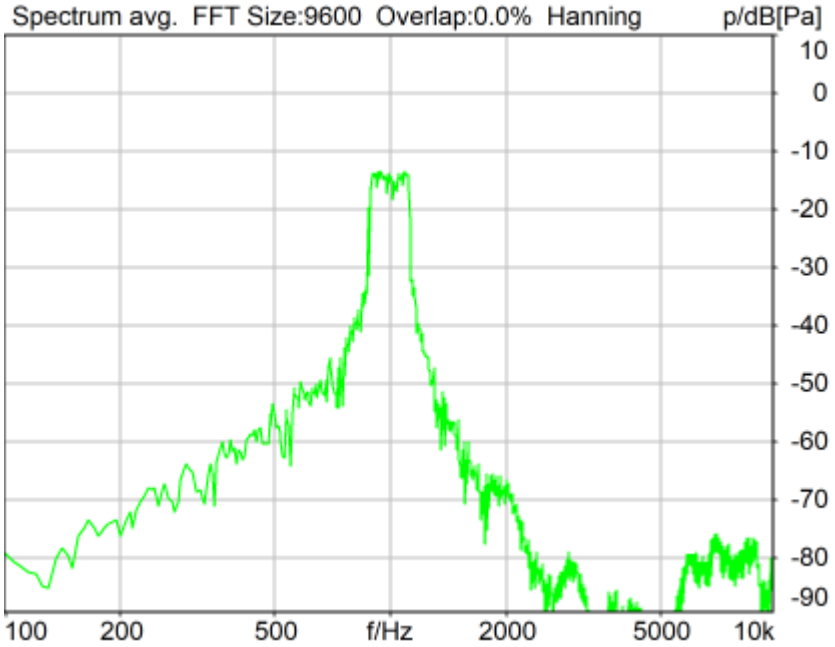
Distortion (Noise) RCV (packed): 31.47 dB (2.67%) Ok

Ok

2024/4/19 17:06 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



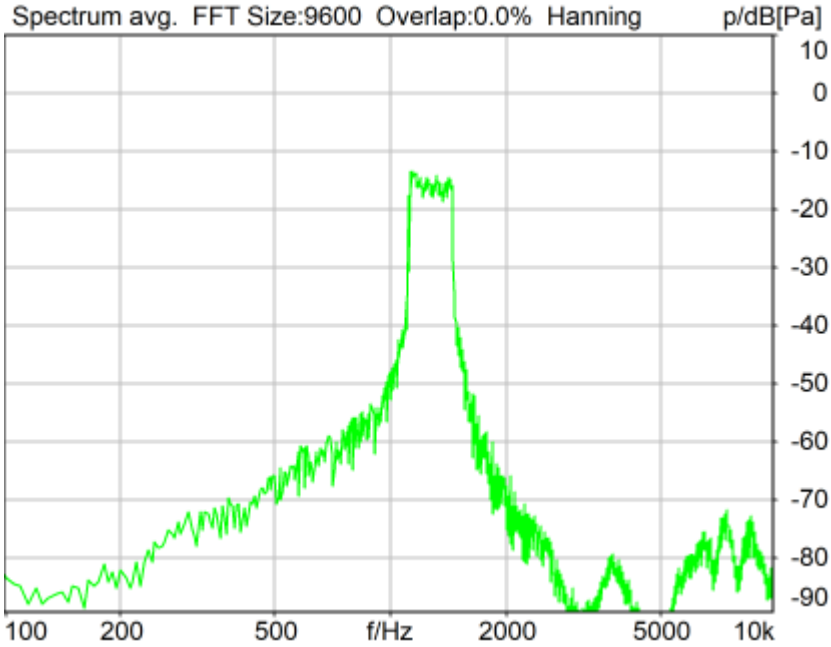
Distortion (Noise) RCV (packed): 26.72 dB (4.61%) Ok

Ok

2024/4/19 17:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



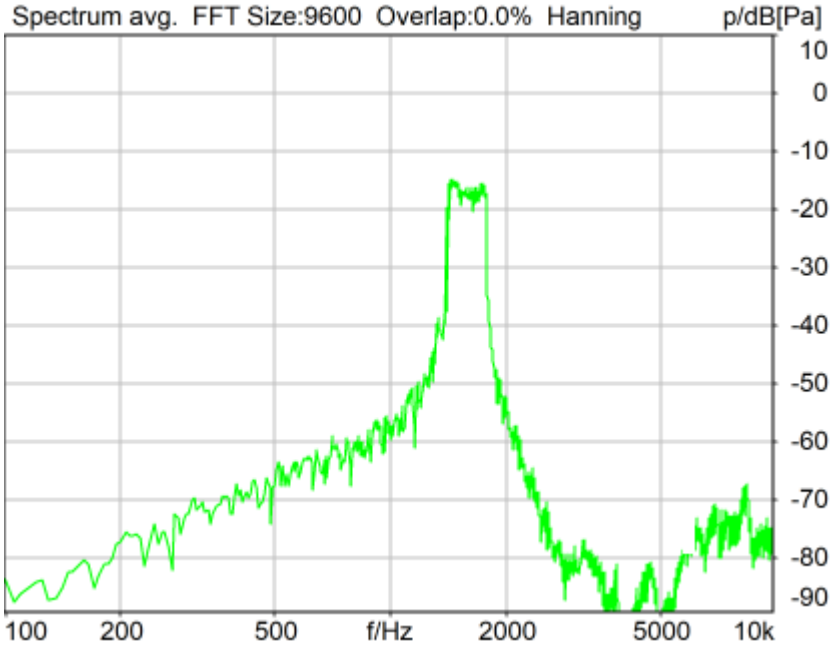
Distortion (Noise) RCV (packed): 26.20 dB (4.90%) Ok

Ok

2024/4/19 17:07 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



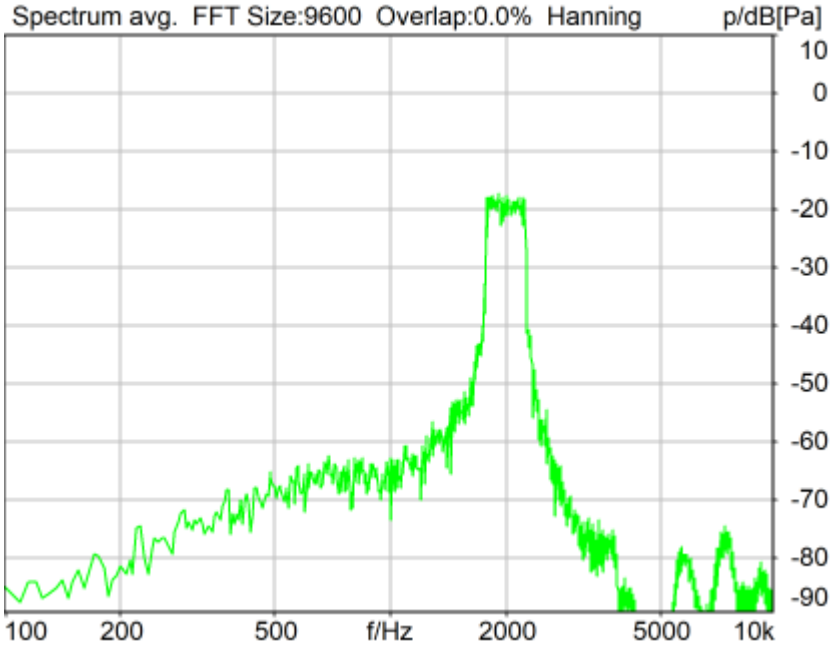
Distortion (Noise) RCV (packed): 27.87 dB (4.04%) Ok

Ok

2024/4/19 17:08 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



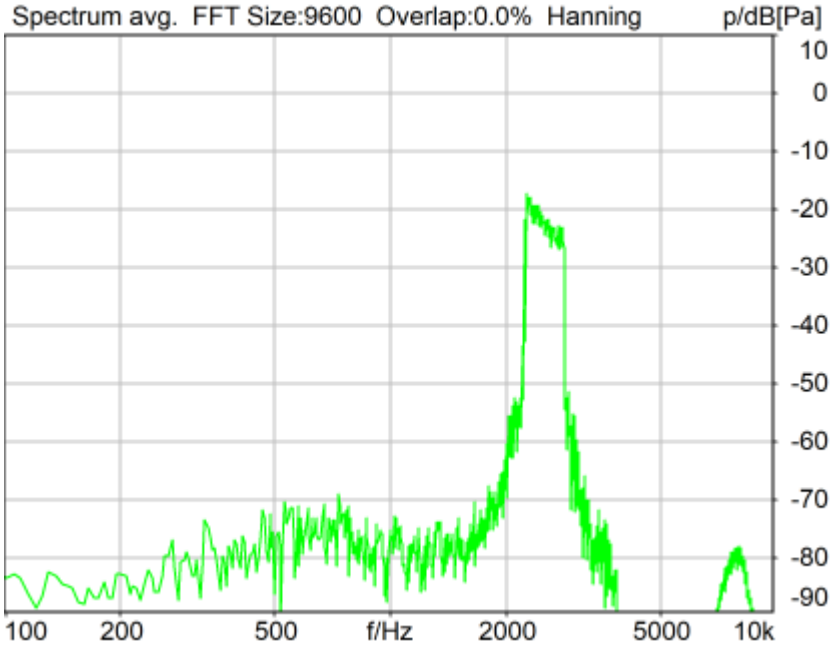
Distortion (Noise) RCV (packed): 27.24 dB (4.34%) Ok

Ok

2024/4/19 17:08 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



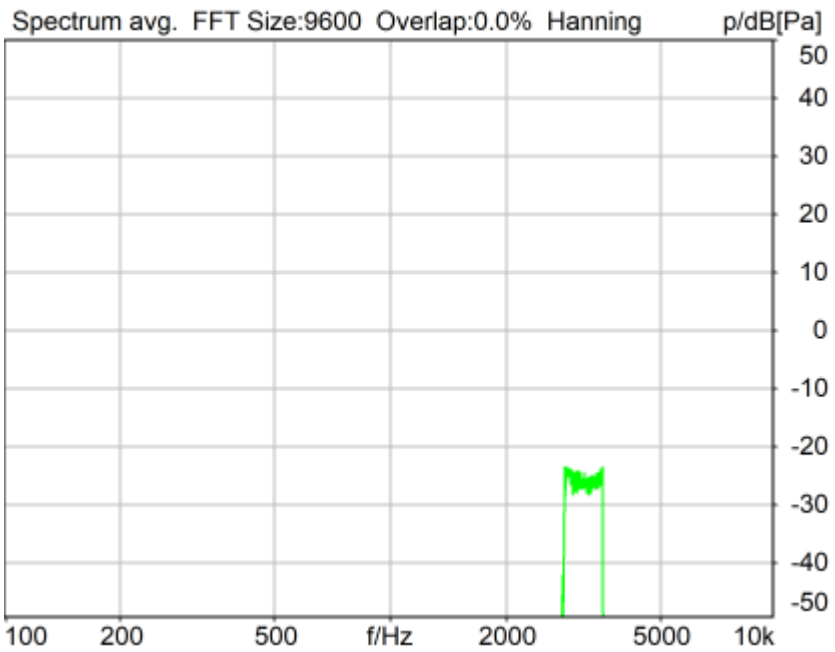
Distortion (Noise) RCV (packed): 35.15 dB (1.75%) Ok

Ok

2024/4/19 17:08 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 39.67 dB (1.04%) Ok

Ok

2024/4/19 17:09 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

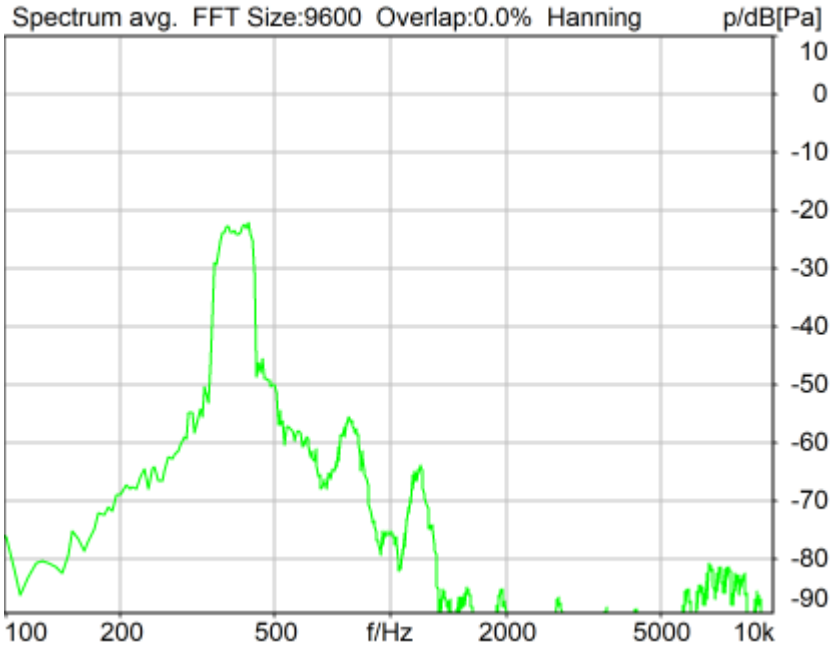
Region	Frequency	SDNR
1	400Hz	29.48 dB
2	500Hz	29.91 dB
3	630Hz	28.68 dB
4	800Hz	31.47 dB
5	1000Hz	26.72 dB
6	1250Hz	26.20 dB
7	1600Hz	27.87 dB
8	2000Hz	27.24 dB
9	2500Hz	35.15 dB
10	3150Hz	39.67 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 26.20dB at 1250Hz.

2024/4/19 17:09 ACQUA

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

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



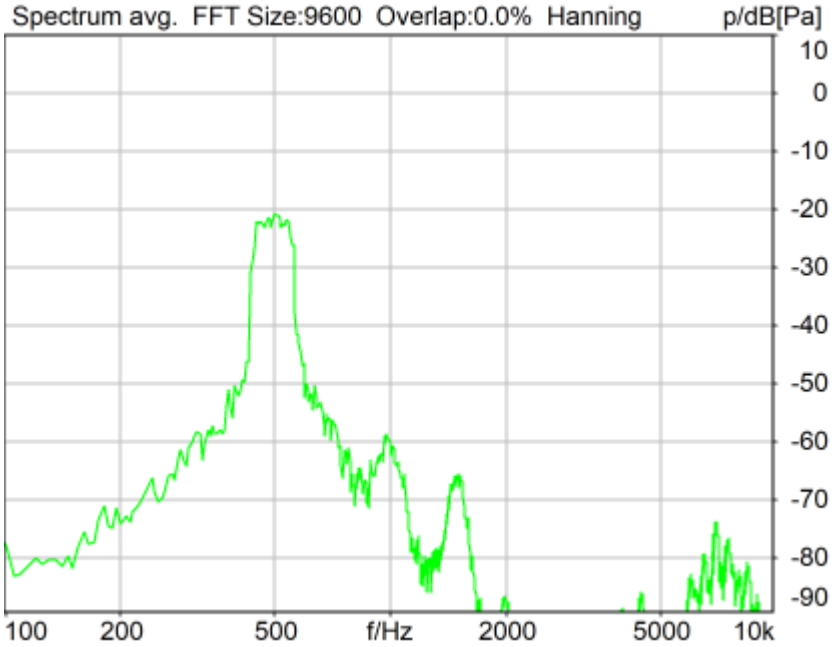
Distortion (Noise) RCV (packed): 29.46 dB (3.36%) Ok

Ok

2024/4/19 17:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



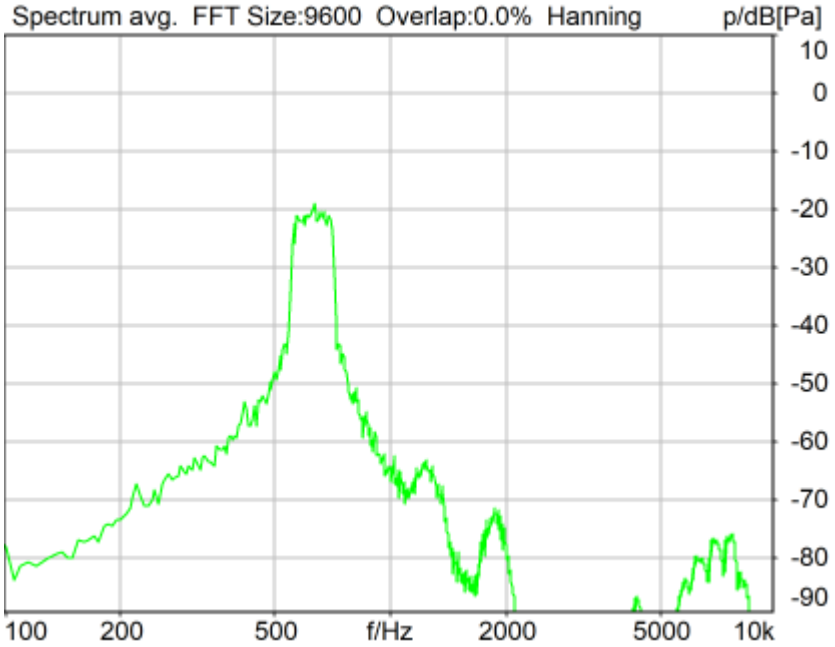
Distortion (Noise) RCV (packed): 30.38 dB (3.03%) Ok

Ok

2024/4/19 17:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



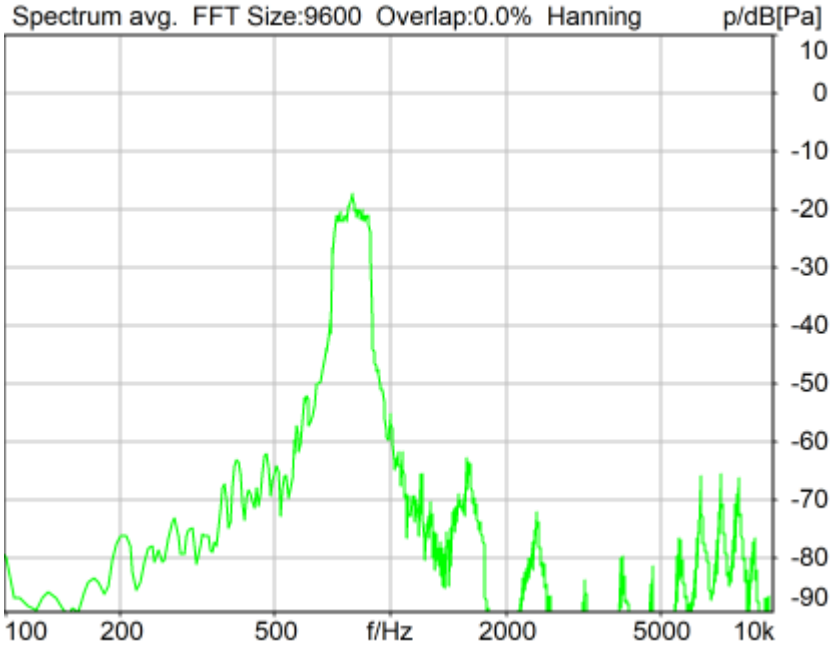
Distortion (Noise) RCV (packed): 29.12 dB (3.50%) Ok

Ok

2024/4/19 17:13 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



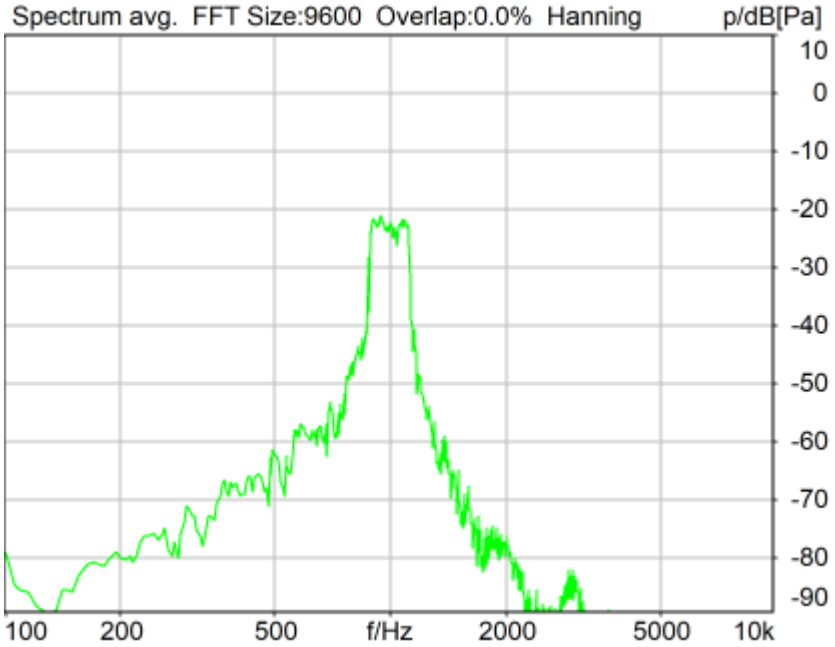
Distortion (Noise) RCV (packed): 32.04 dB (2.50%) Ok

Ok

2024/4/19 17:14 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



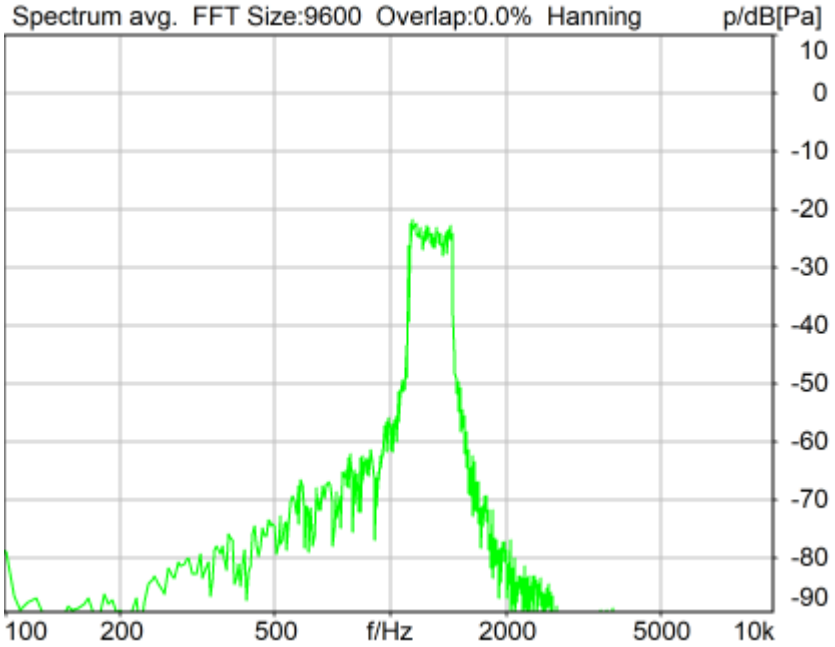
Distortion (Noise) RCV (packed): 25.82 dB (5.11%) Ok

Ok

2024/4/19 17:14 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



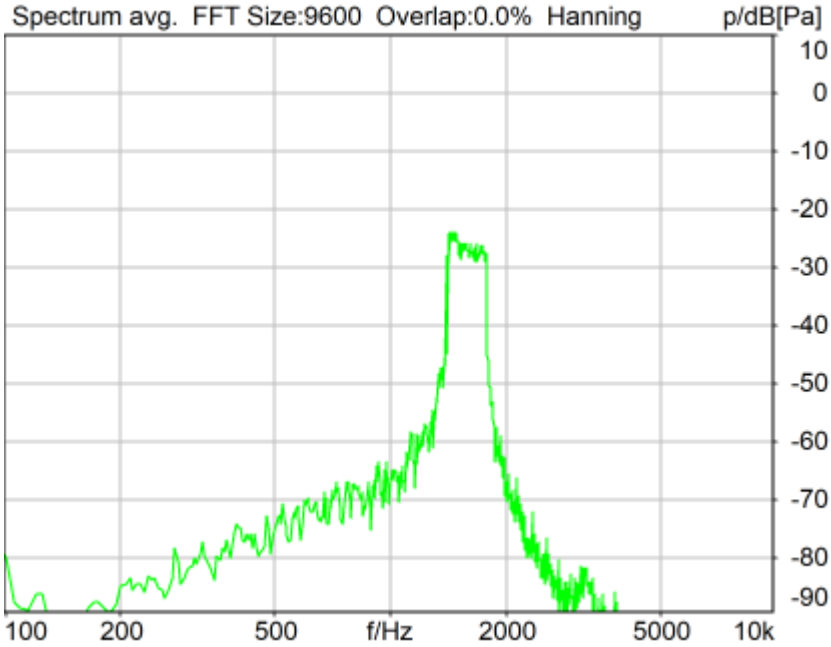
Distortion (Noise) RCV (packed): 27.12 dB (4.40%) Ok

Ok

2024/4/19 17:15 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



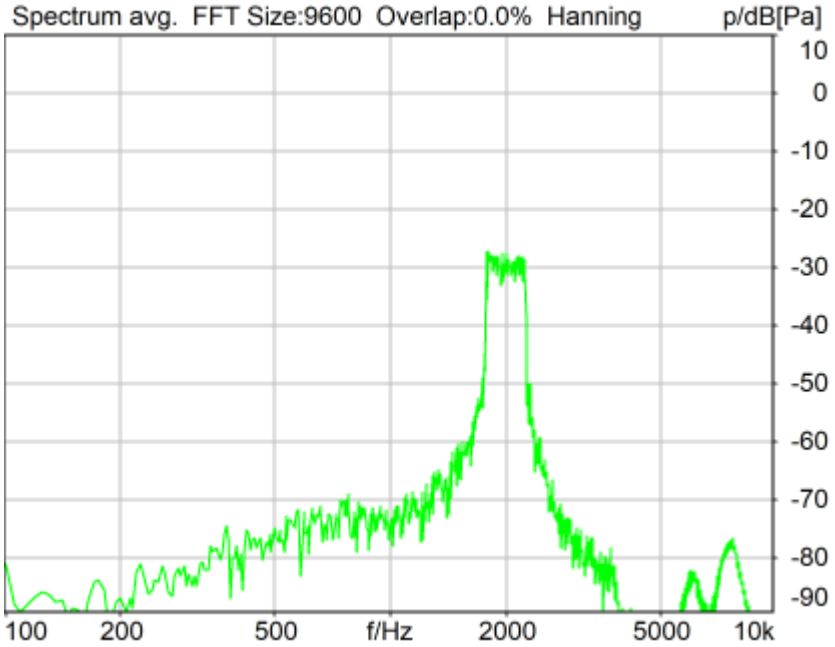
Distortion (Noise) RCV (packed): 27.55 dB (4.19%) Ok

Ok

2024/4/19 17:15 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



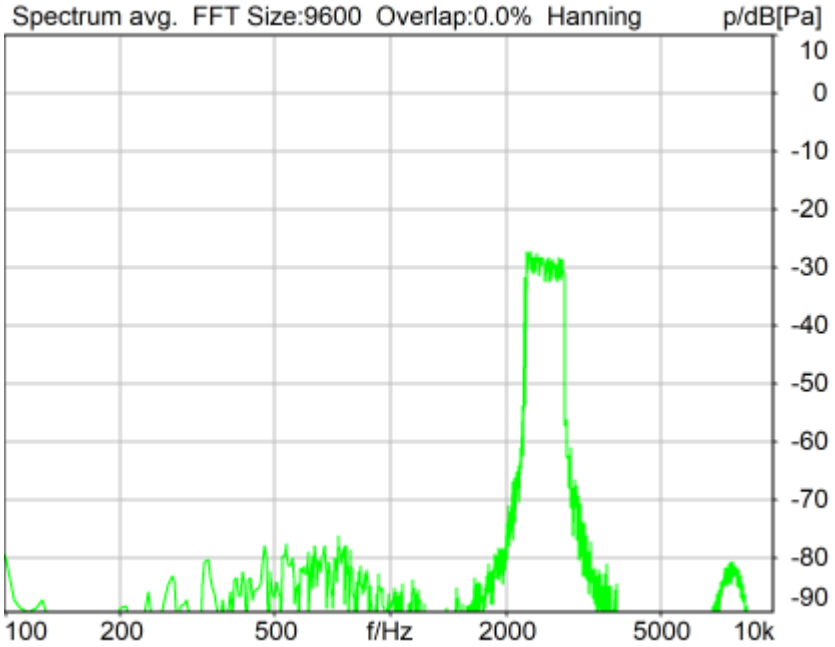
Distortion (Noise) RCV (packed): 26.00 dB (5.01%) Ok

Ok

2024/4/19 17:15 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



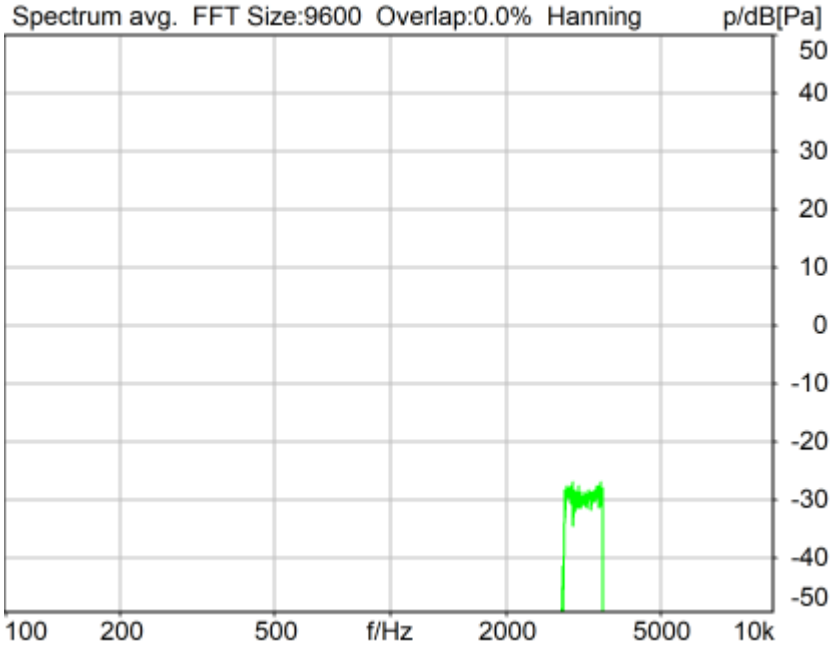
Distortion (Noise) RCV (packed): 36.42 dB (1.51%) Ok

Ok

2024/4/19 17:16 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 38.14 dB (1.24%) Ok

Ok

2024/4/19 17:16 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

Region	Frequency	SDNR
1	400Hz	29.46 dB

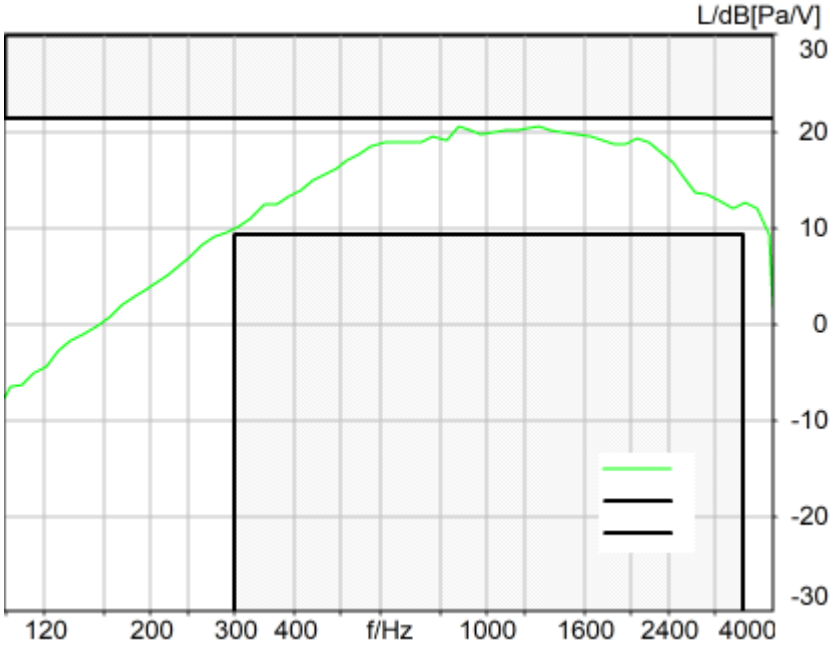
2	500Hz	30.38 dB
3	630Hz	29.12 dB
4	800Hz	32.04 dB
5	1000Hz	25.82 dB
6	1250Hz	27.12 dB
7	1600Hz	27.55 dB
8	2000Hz	26.00 dB
9	2500Hz	36.42 dB
10	3150Hz	38.14 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 25.82dB at 1000Hz.

2024/4/19 17:16 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



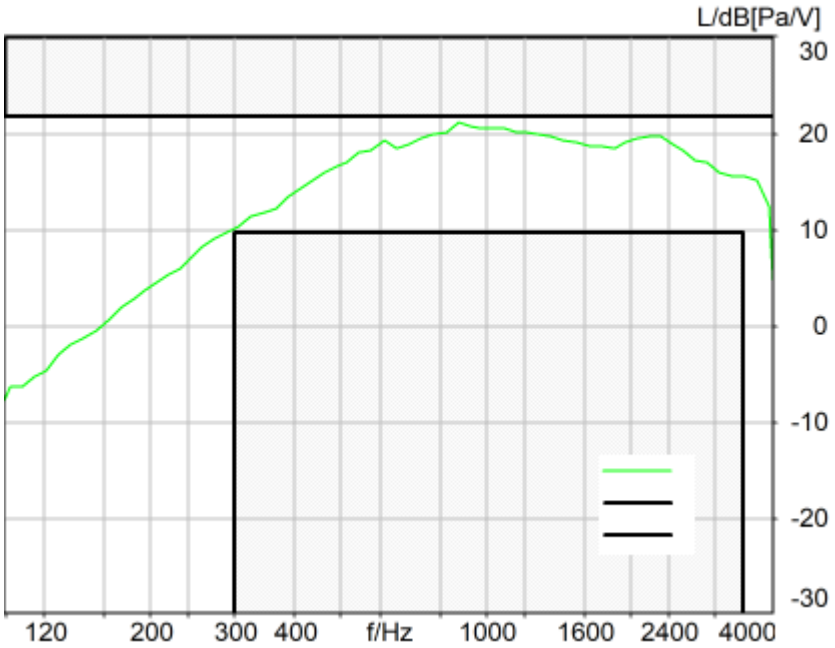
Absolute minimal distance
0.80 dB at 1285.9 Hz Ok

Ok

2024/4/19 17:09 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



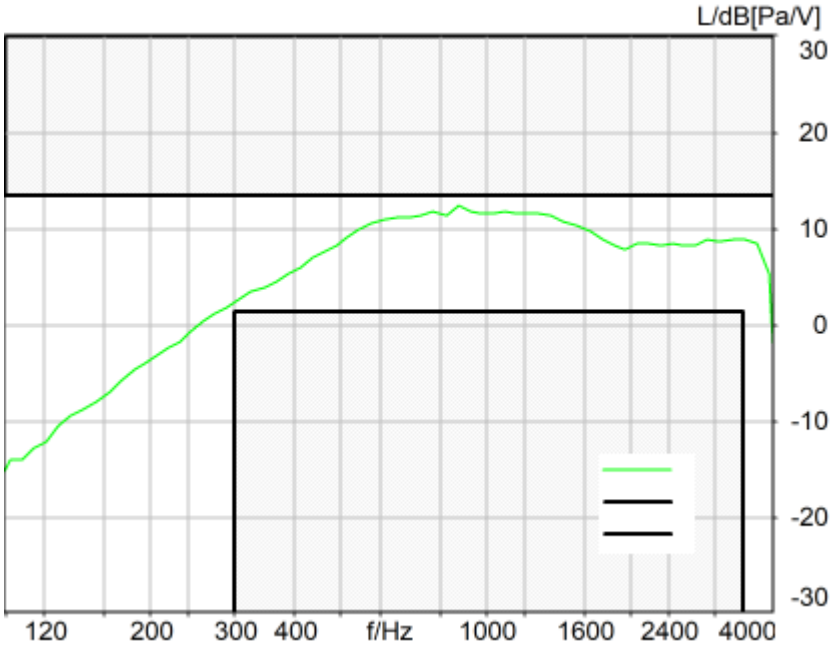
Absolute minimal distance
0.58 dB at 873.9 Hz Ok

Ok

2024/4/19 17:10 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



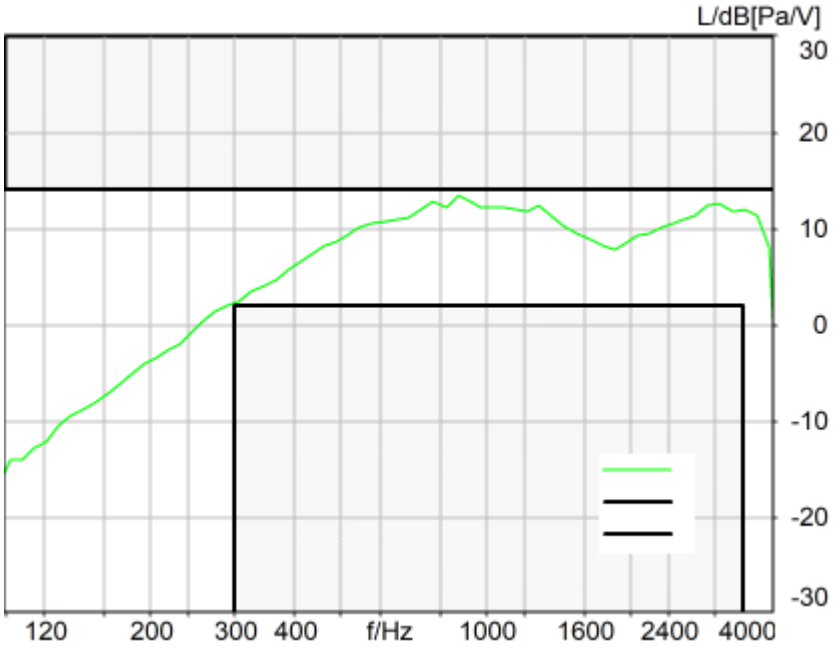
Absolute minimal distance
1.07 dB at 873.9 Hz Ok

Ok

2024/4/19 17:17 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.50 dB at 873.9 Hz Ok

Ok

2024/4/19 17:17 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

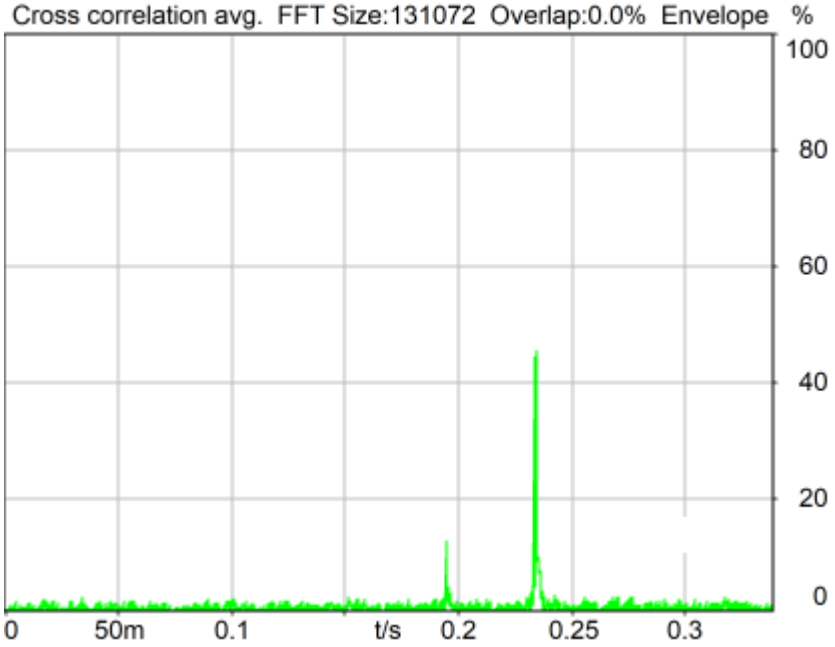
Measurement Object	WIFI 5.8G_802.11a 6M_EVS WB 128kbps_CH157
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/27 12:10
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

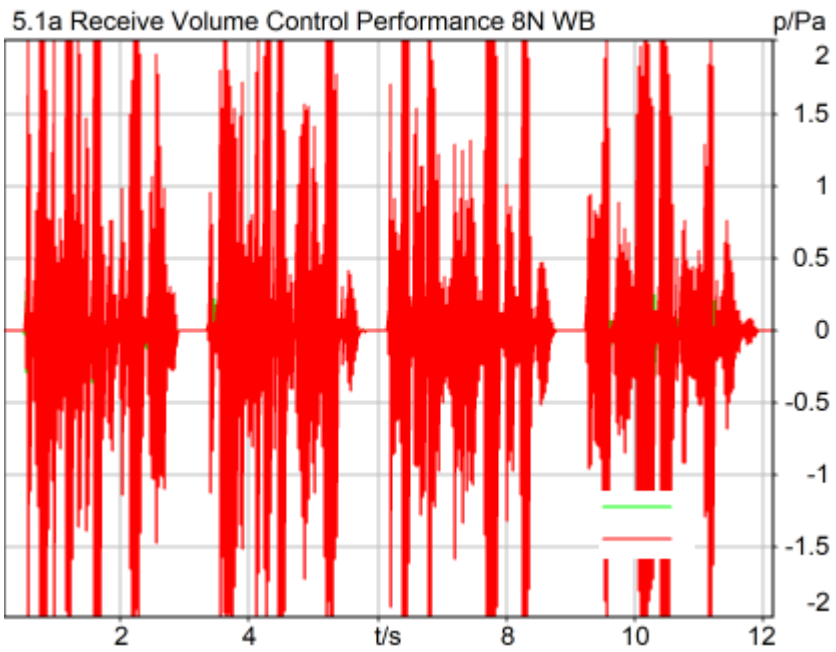


Channel	Delay
RCV*Source	234.7 ms

2024/4/19 17:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

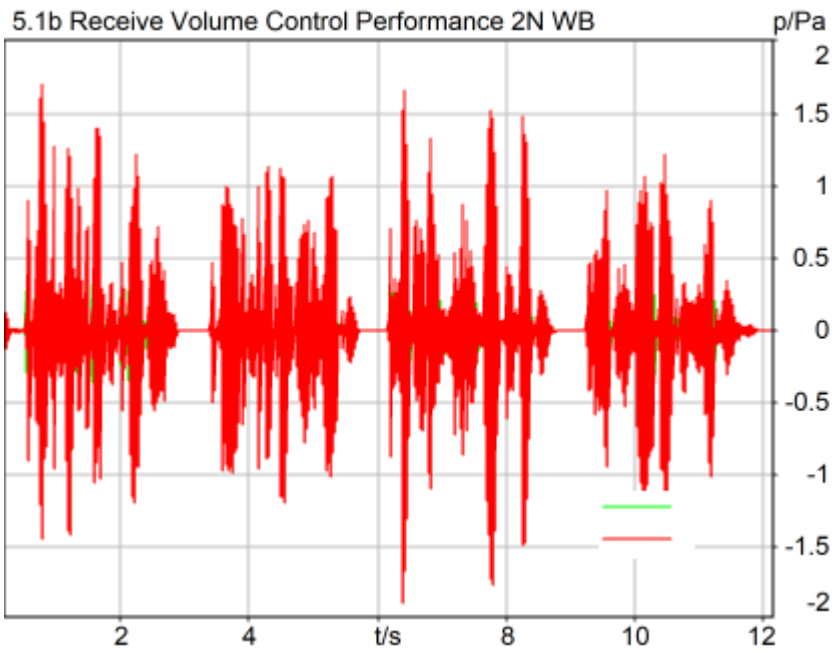
Channel	Speech level	Activity	Corrected speech level	
RCV	85.70 dB[SPL]	84.18%	15.70 dB[SPL]	Ok

Ok

2024/4/19 17:31 ACQUA 6.0.200

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

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



Correction

X - 70

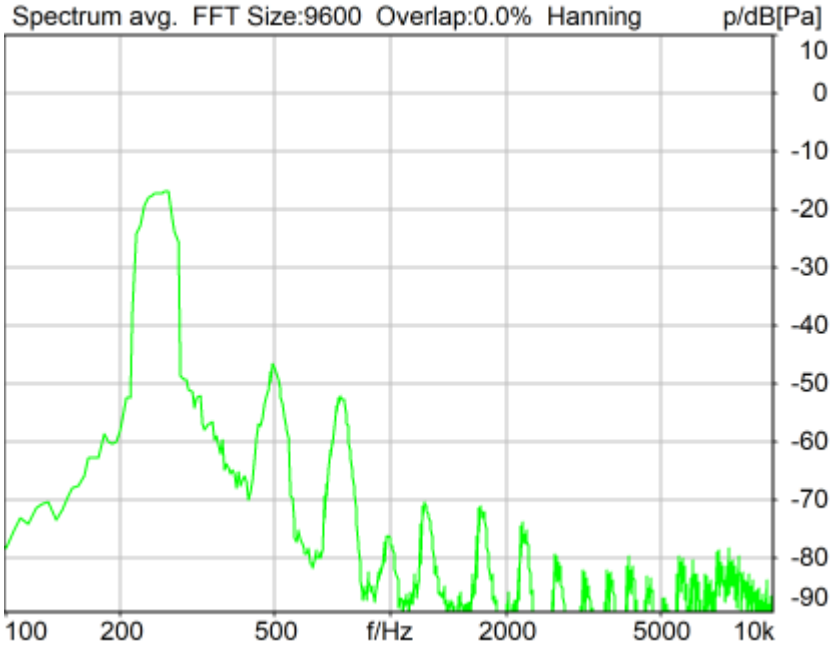
Channel	Speech level	Activity	Corrected speech level	
RCV	79.09 dB[SPL]	83.81%	9.09 dB[SPL]	Ok

Ok

2024/4/19 17:23 ACQUA 6.0.200

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

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



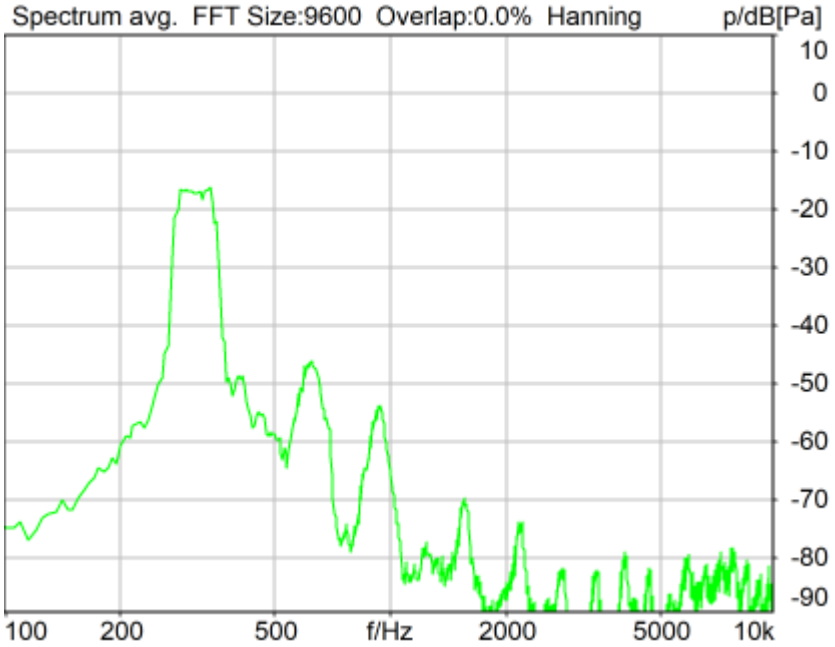
Distortion (Noise) RCV (packed): 31.09 dB (2.79%) Ok

Ok

2024/4/19 17:32 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



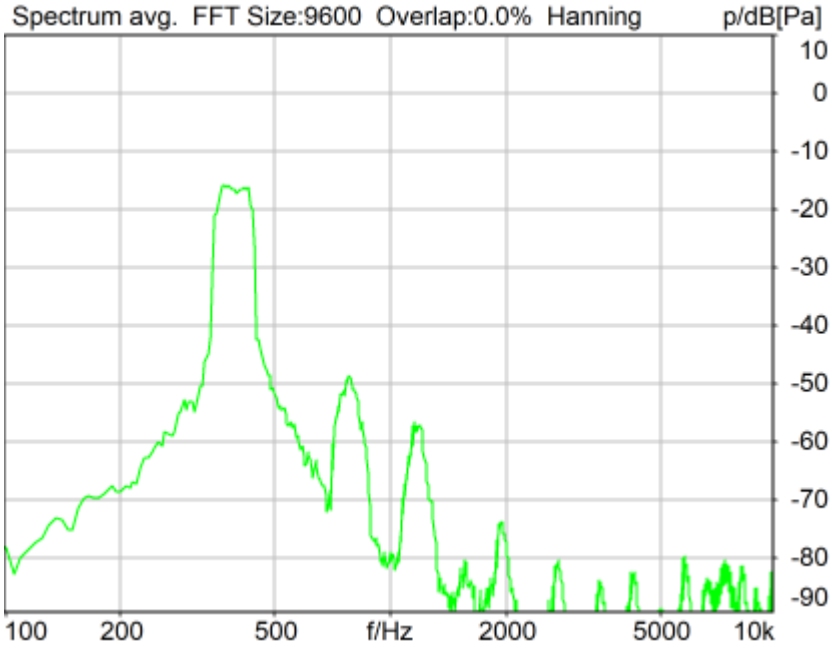
Distortion (Noise) RCV (packed): 30.11 dB (3.12%) Ok

Ok

2024/4/19 17:32 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



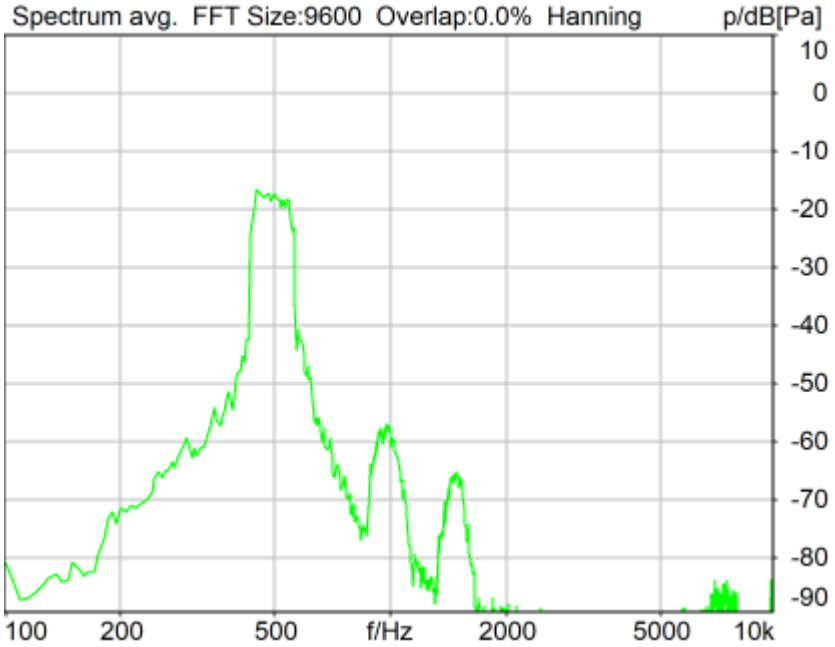
Distortion (Noise) RCV (packed): 32.08 dB (2.49%) Ok

Ok

2024/4/19 17:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



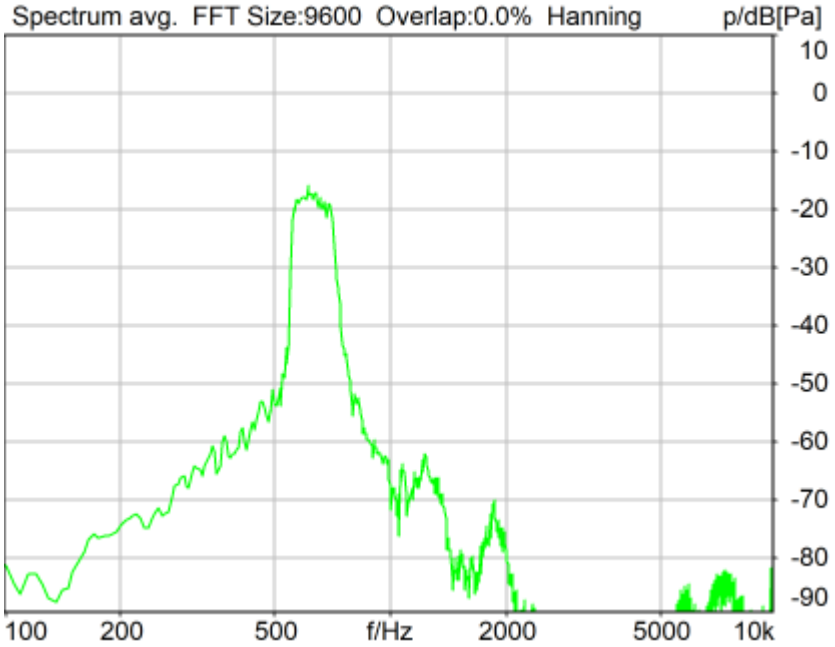
Distortion (Noise) RCV (packed): 34.29 dB (1.93%) Ok

Ok

2024/4/19 17:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



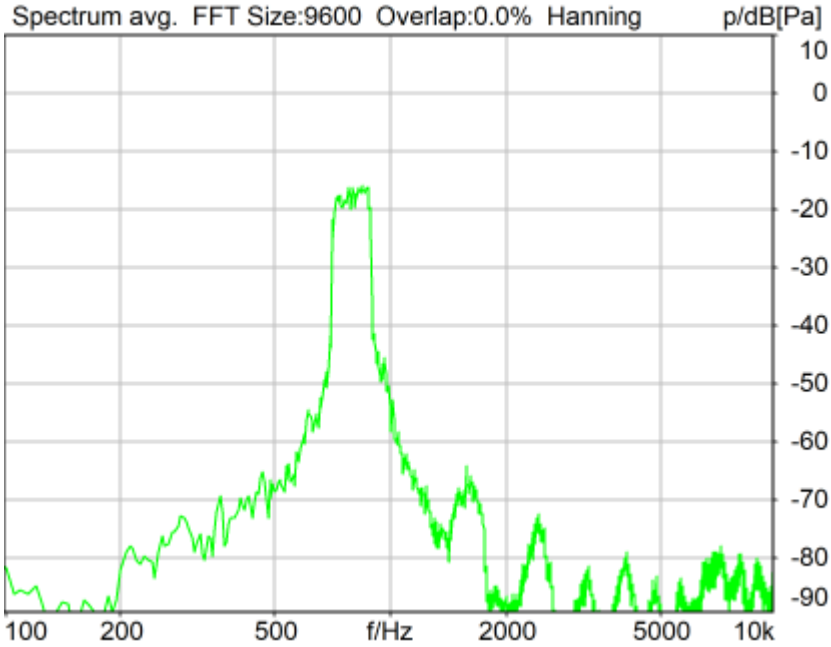
Distortion (Noise) RCV (packed): 31.79 dB (2.57%) Ok

Ok

2024/4/19 17:33 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



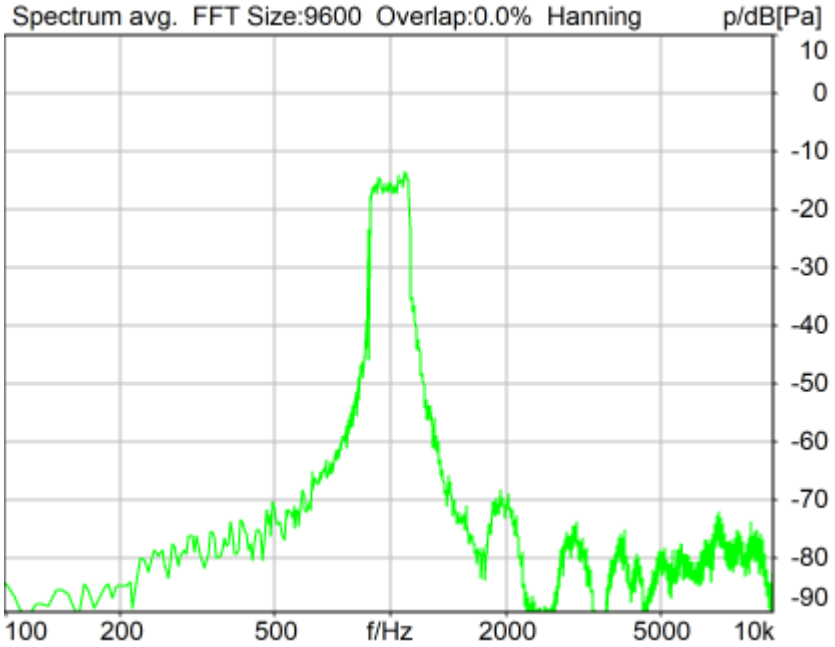
Distortion (Noise) RCV (packed): 33.19 dB (2.19%) Ok

Ok

2024/4/19 17:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



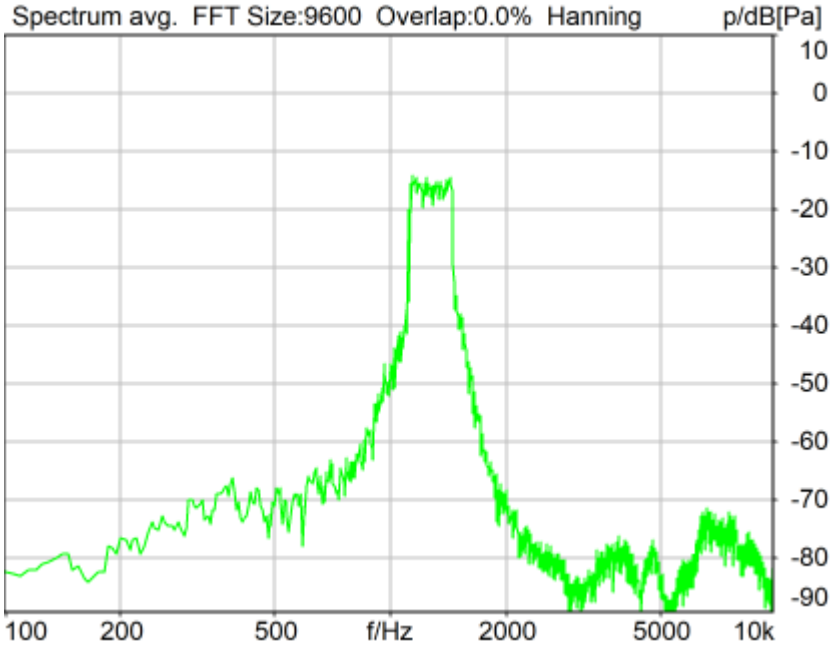
Distortion (Noise) RCV (packed): 32.46 dB (2.38%) Ok

Ok

2024/4/19 17:34 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



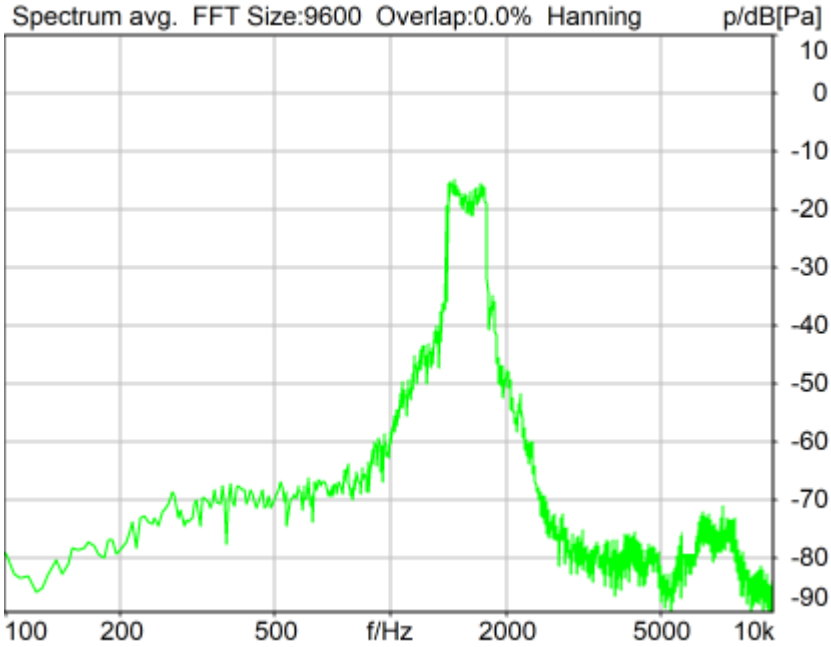
Distortion (Noise) RCV (packed): 24.06 dB (6.27%) Ok

Ok

2024/4/19 17:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



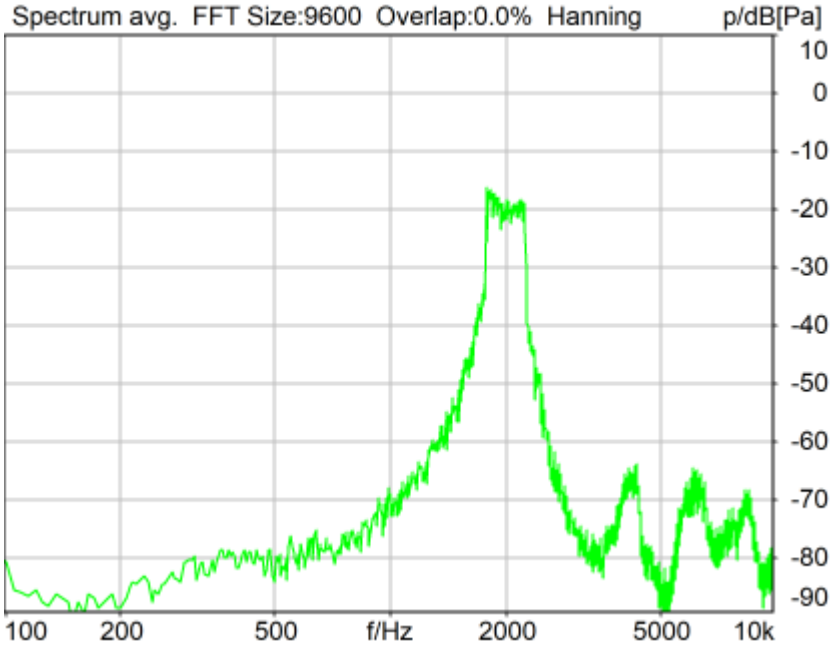
Distortion (Noise) RCV (packed): 23.06 dB (7.03%) Ok

Ok

2024/4/19 17:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



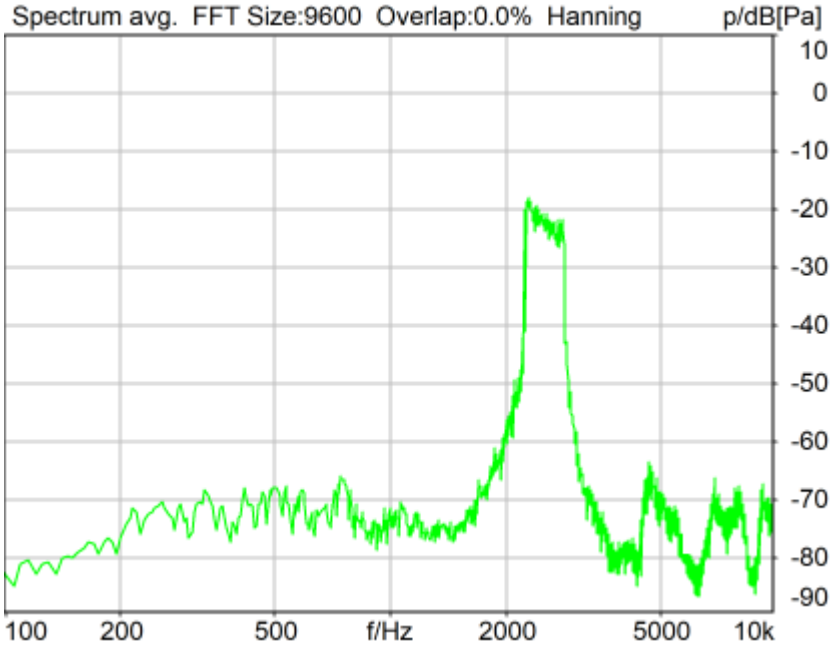
Distortion (Noise) RCV (packed): 22.27 dB (7.70%) Ok

Ok

2024/4/19 17:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



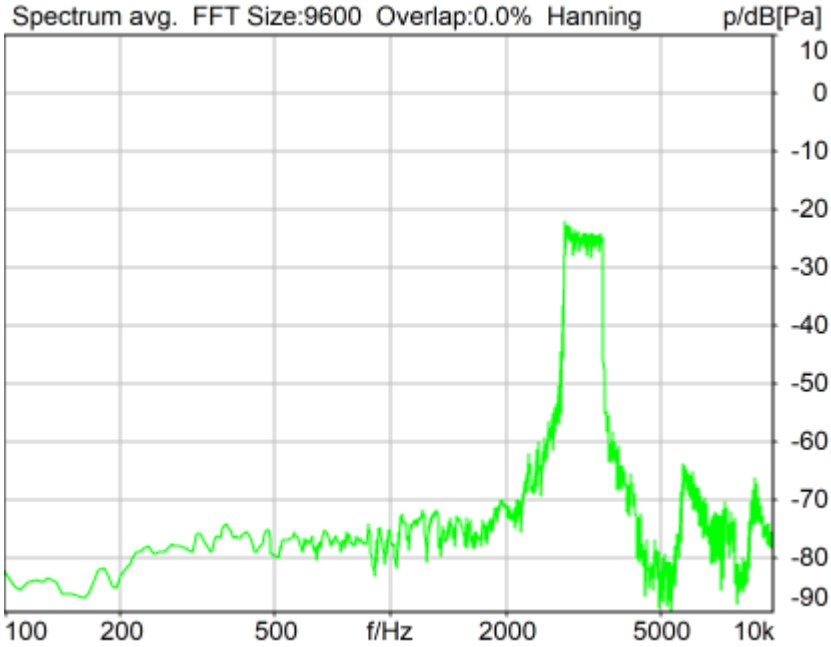
Distortion (Noise) RCV (packed): 30.08 dB (3.13%) Ok

Ok

2024/4/19 17:36 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



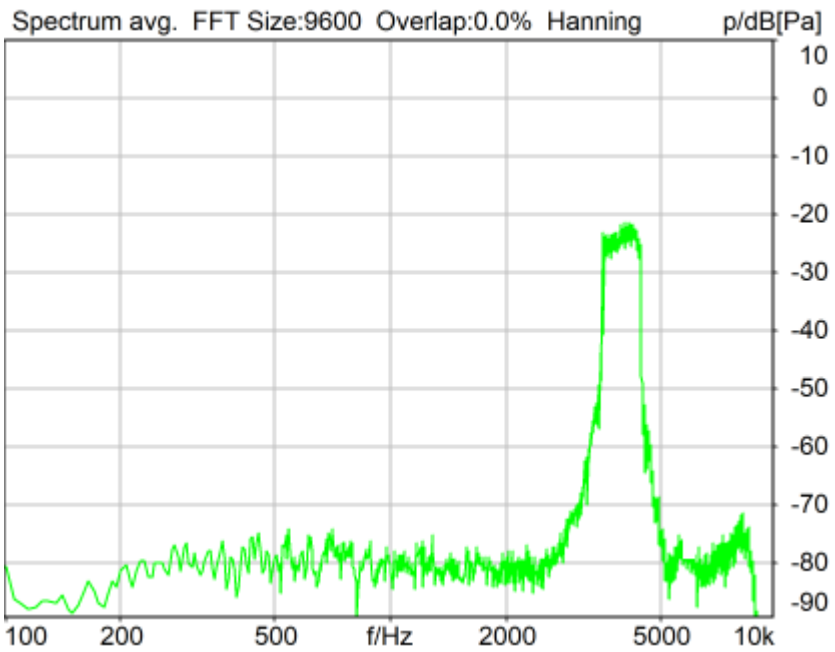
Distortion (Noise) RCV (packed): 30.09 dB (3.13%) Ok

Ok

2024/4/19 17:36 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



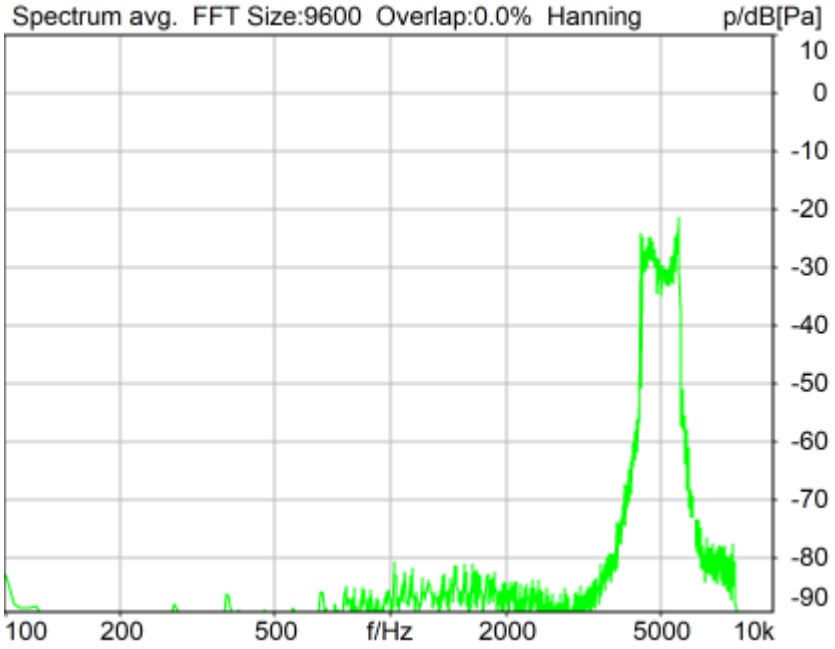
Distortion (Noise) RCV (packed): 32.36 dB (2.41%) Ok

Ok

2024/4/19 17:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 31.98 dB (2.52%) Ok

Ok

2024/4/19 17:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

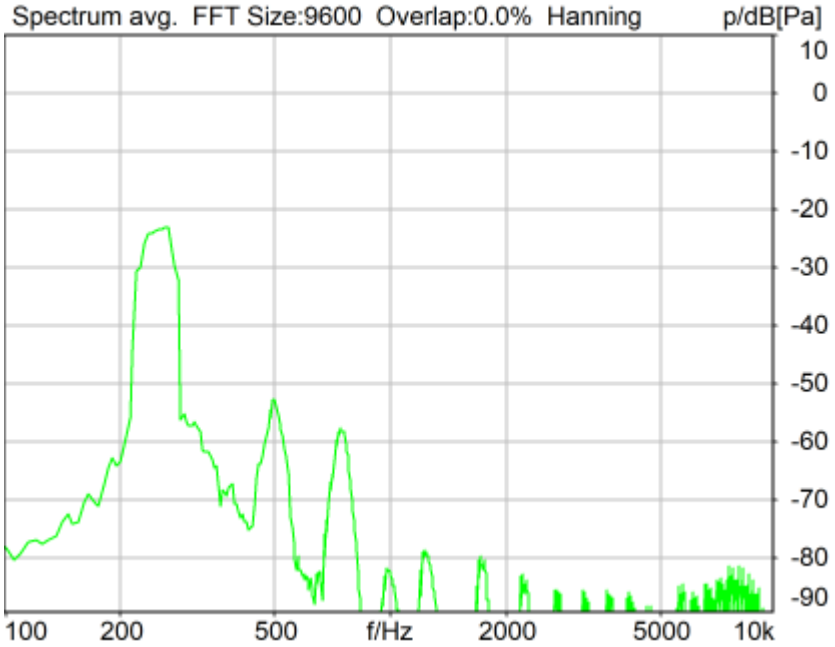
Region	Frequency	SDNR
1	250Hz	31.09 dB
2	315Hz	30.11 dB
3	400Hz	32.08 dB
4	500Hz	34.29 dB
5	630Hz	31.79 dB
6	800Hz	33.19 dB
7	1000Hz	32.46 dB
8	1250Hz	24.06 dB
9	1600Hz	23.06 dB
10	2000Hz	22.27 dB
11	2500Hz	30.08 dB
12	3150Hz	30.09 dB
13	4000Hz	32.36 dB
14	5000Hz	31.98 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.27dB at 2000Hz.

2024/4/19 17:37 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



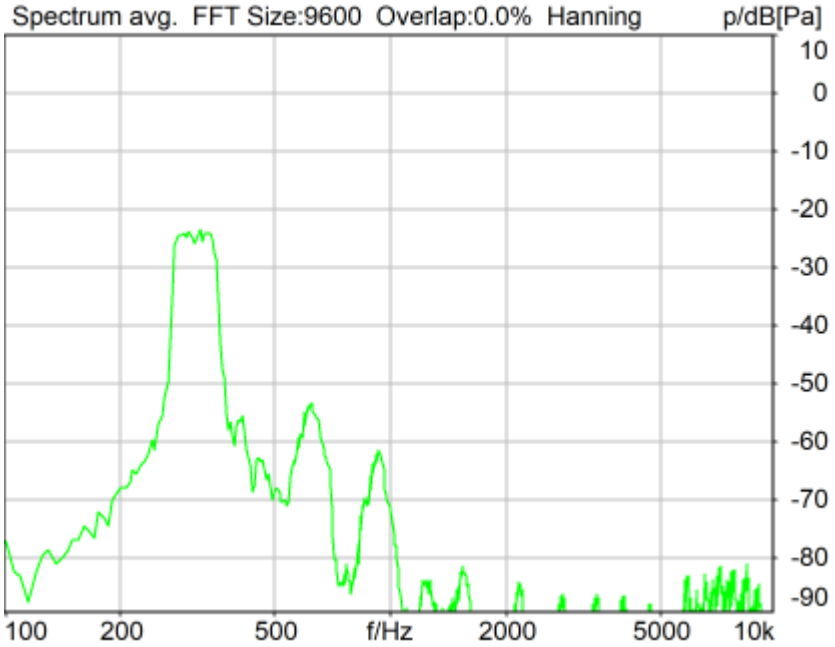
Distortion (Noise) RCV (packed): 30.63 dB (2.94%) Ok

Ok

2024/4/19 17:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



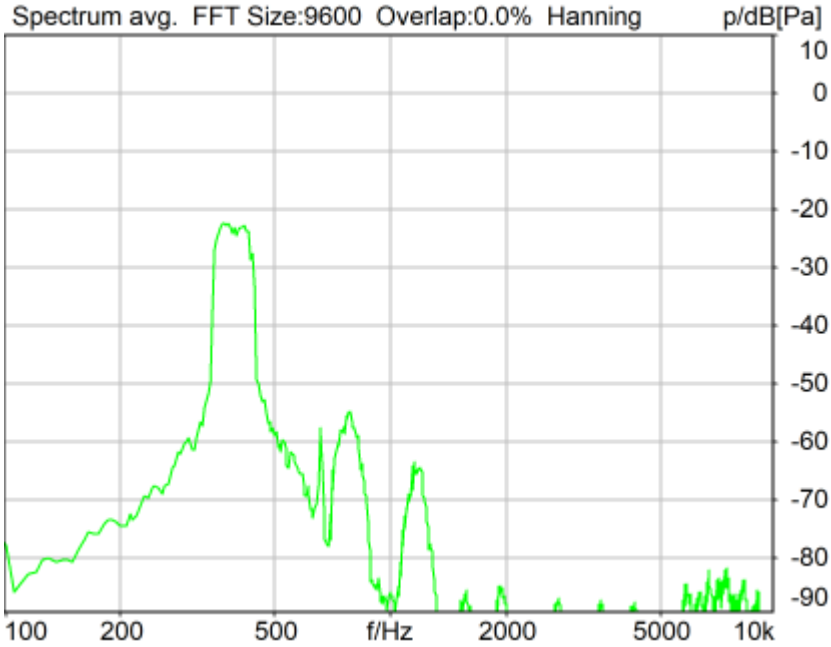
Distortion (Noise) RCV (packed): 30.42 dB (3.01%) Ok

Ok

2024/4/19 17:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



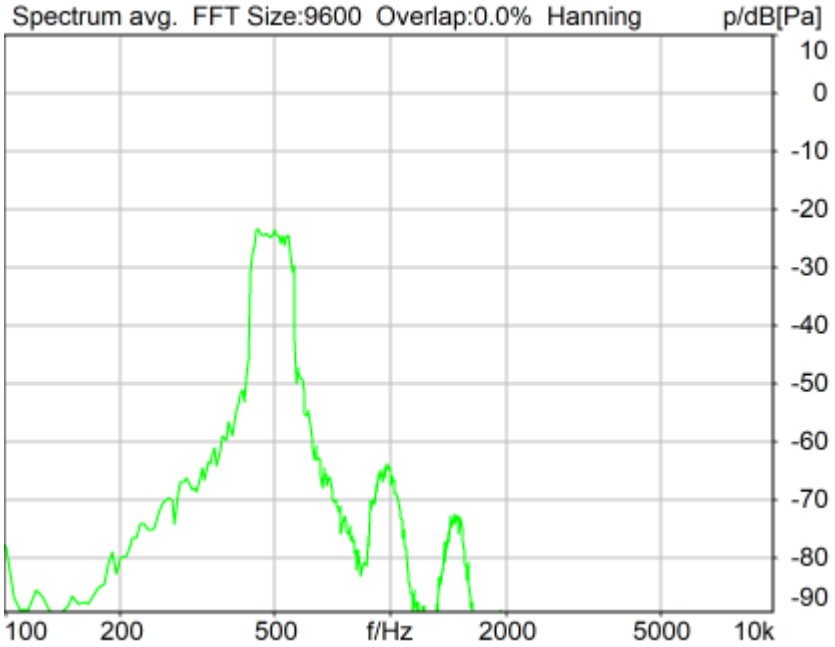
Distortion (Noise) RCV (packed): 31.59 dB (2.63%) Ok

Ok

2024/4/19 17:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



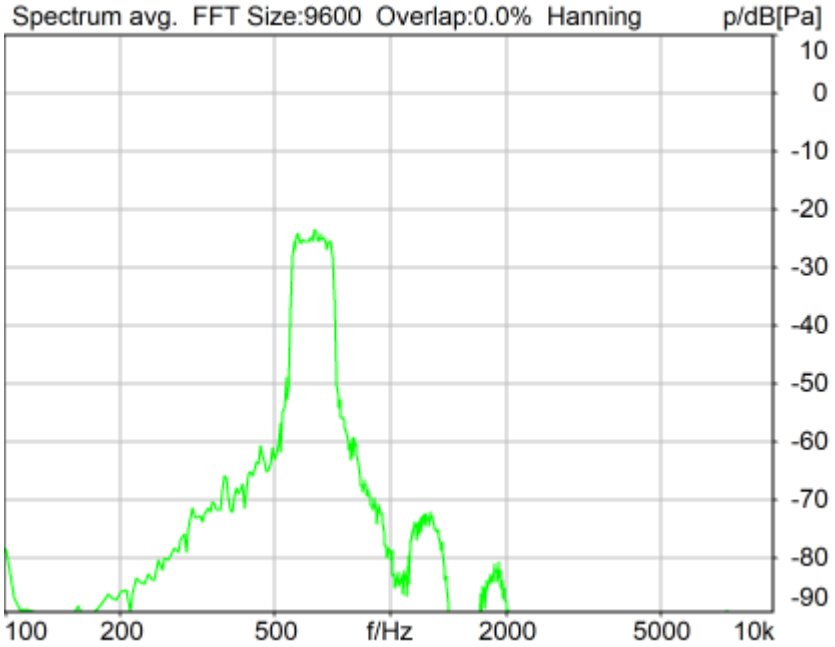
Distortion (Noise) RCV (packed): 34.43 dB (1.90%) Ok

Ok

2024/4/19 17:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



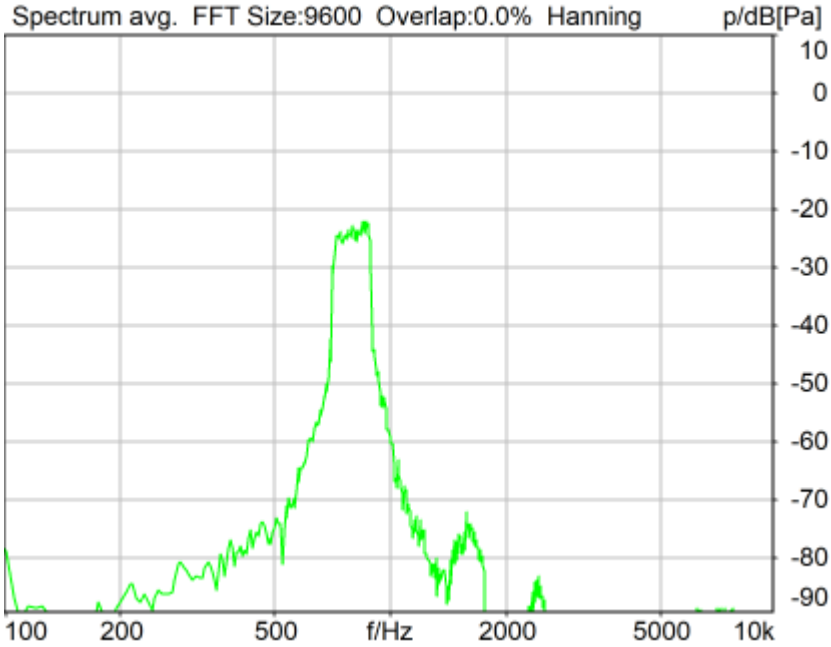
Distortion (Noise) RCV (packed): 35.80 dB (1.62%) Ok

Ok

2024/4/19 17:25 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



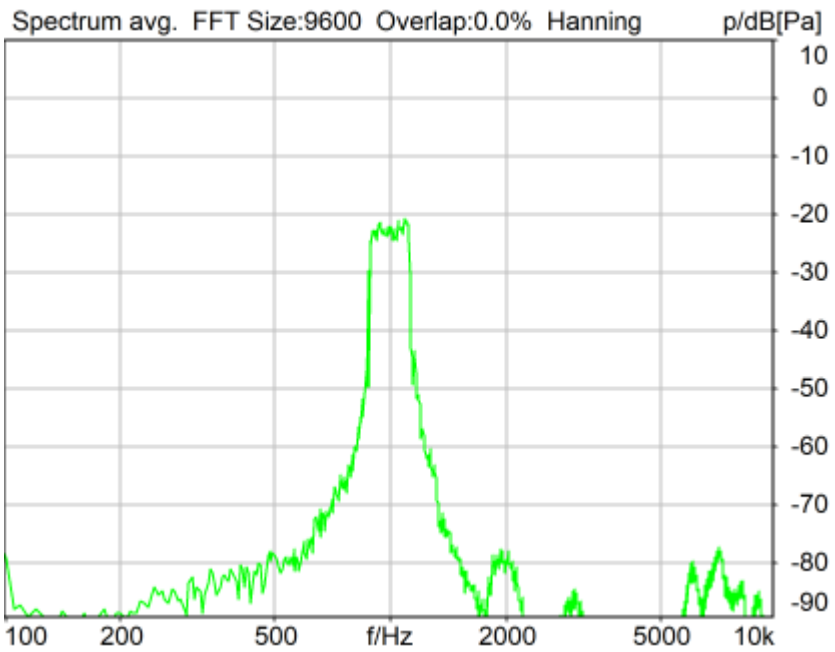
Distortion (Noise) RCV (packed): 31.61 dB (2.63%) Ok

Ok

2024/4/19 17:25 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



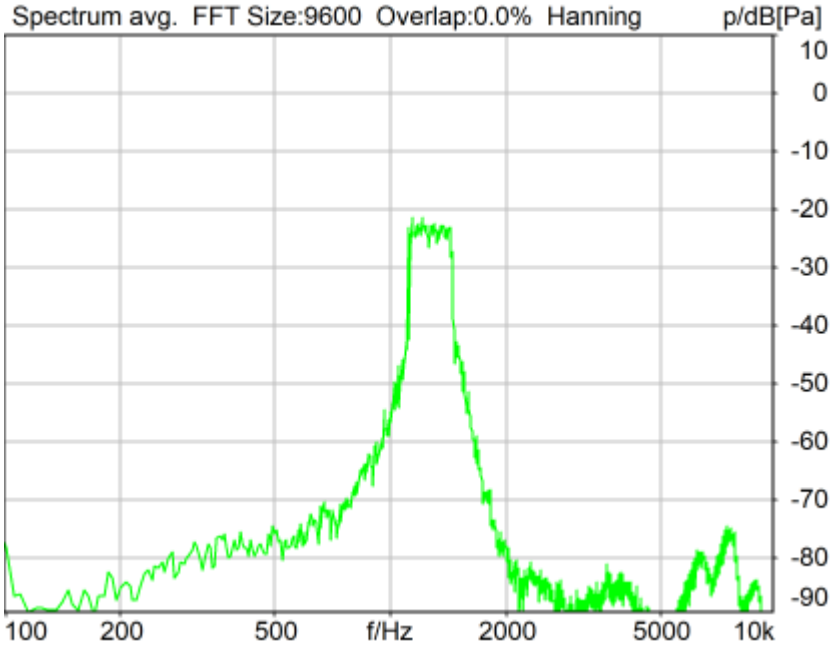
Distortion (Noise) RCV (packed): 32.63 dB (2.34%) Ok

Ok

2024/4/19 17:25 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



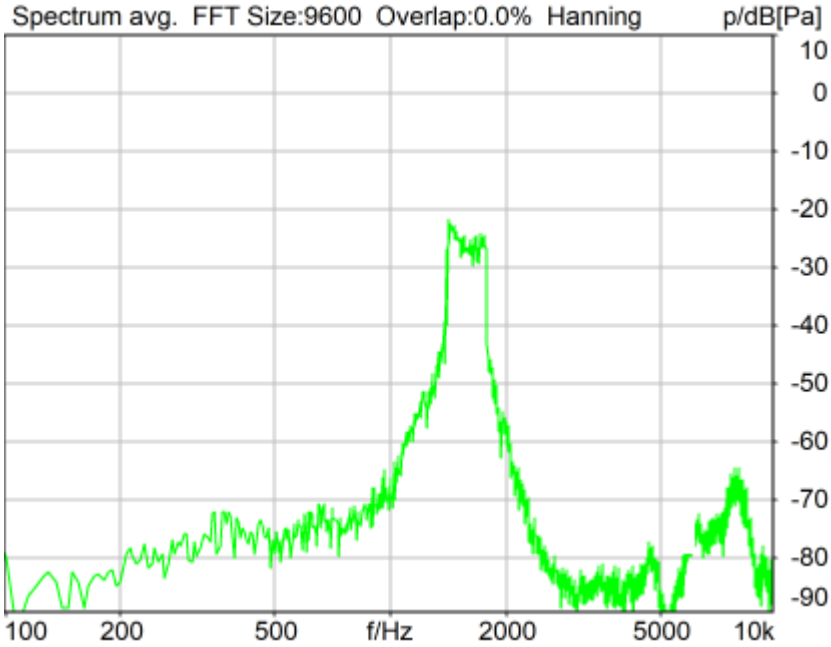
Distortion (Noise) RCV (packed): 23.96 dB (6.34%) Ok

Ok

2024/4/19 17:26 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



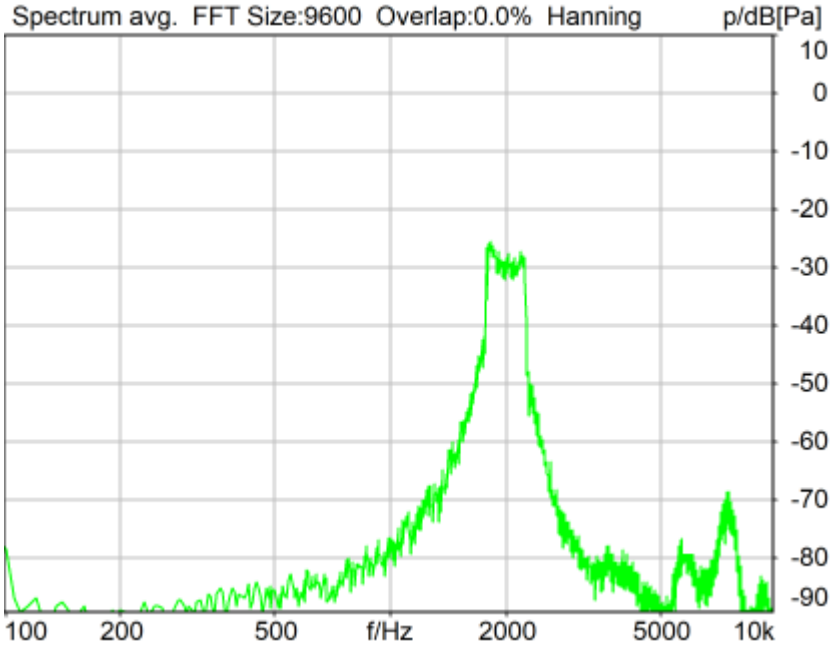
Distortion (Noise) RCV (packed): 23.89 dB (6.39%) Ok

Ok

2024/4/19 17:26 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



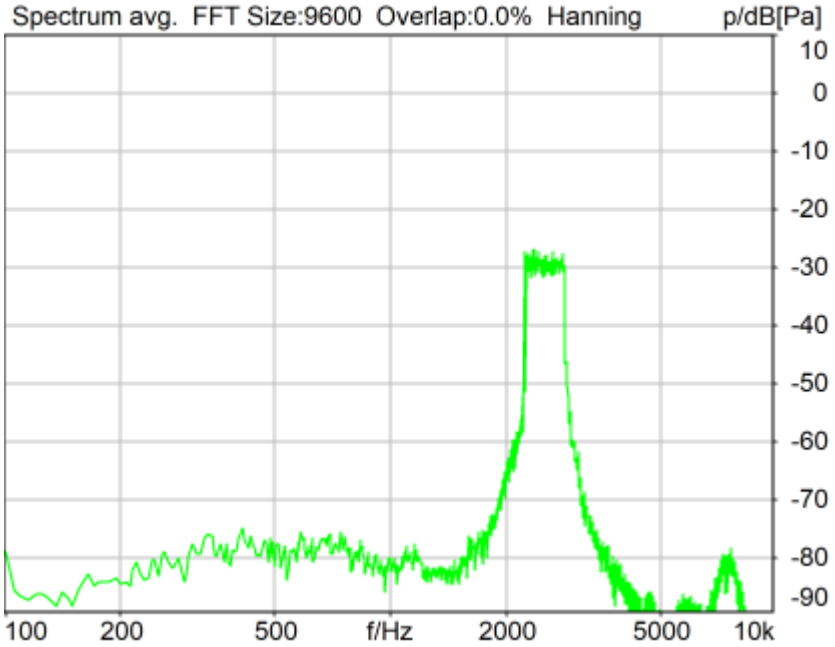
Distortion (Noise) RCV (packed): 21.54 dB (8.37%) Ok

Ok

2024/4/19 17:27 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



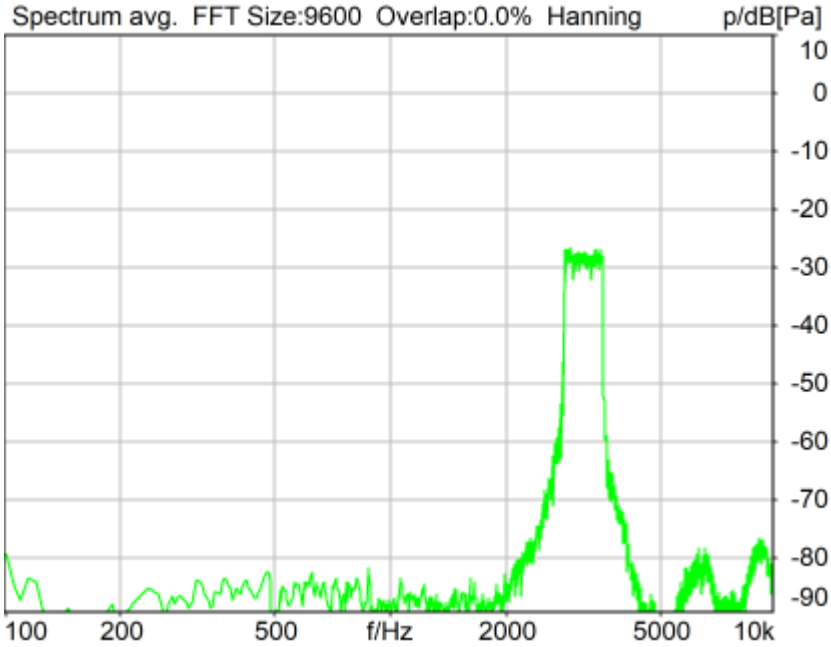
Distortion (Noise) RCV (packed): 28.11 dB (3.93%) Ok

Ok

2024/4/19 17:27 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



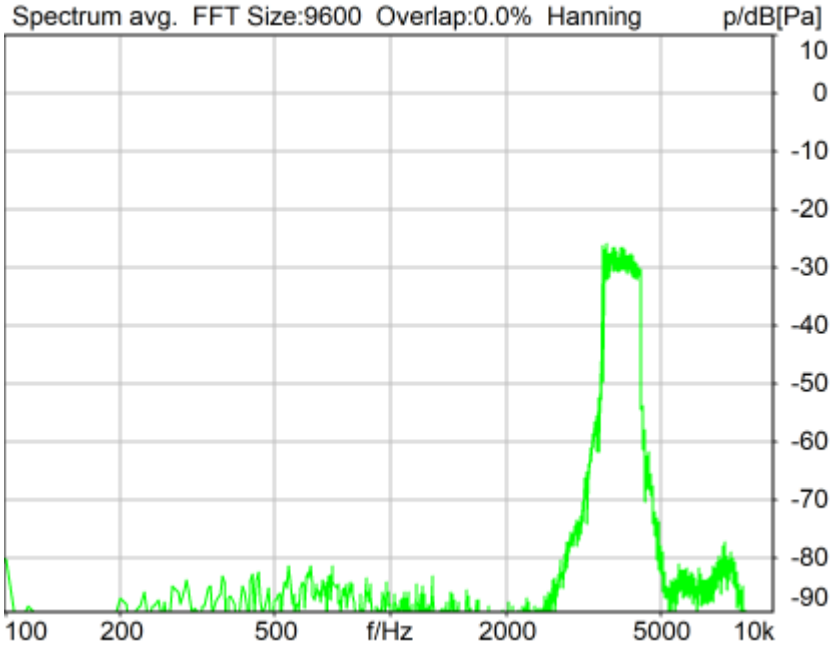
Distortion (Noise) RCV (packed): 34.01 dB (1.99%) Ok

Ok

2024/4/19 17:27 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



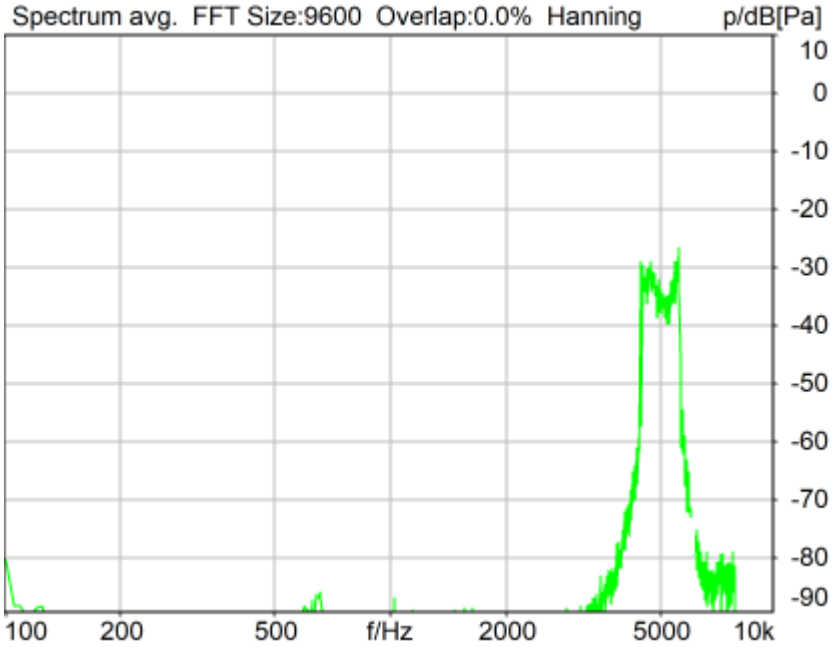
Distortion (Noise) RCV (packed): 31.45 dB (2.68%) Ok

Ok

2024/4/19 17:28 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 31.90 dB (2.54%) Ok

Ok

2024/4/19 17:28 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

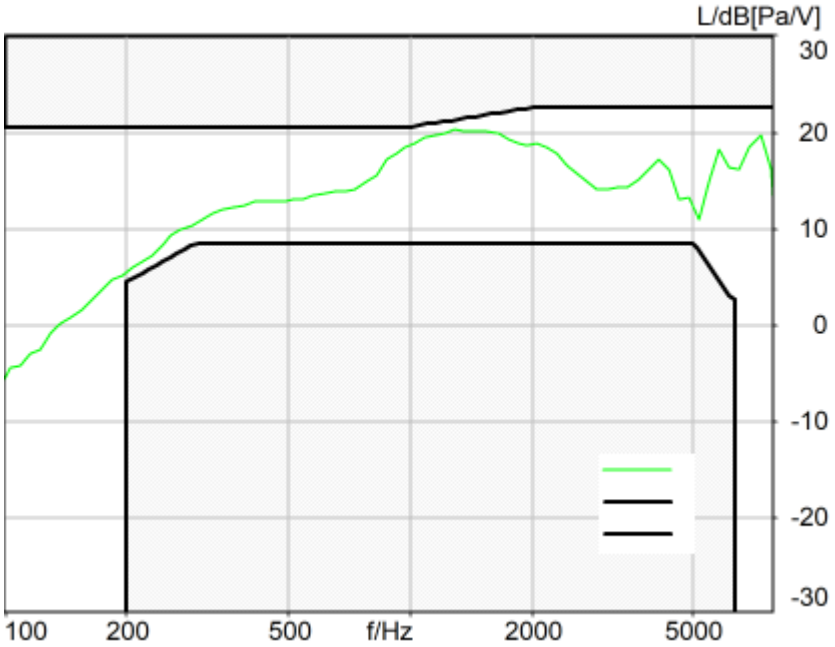
Region	Frequency	SDNR
1	250Hz	30.63 dB
2	315Hz	30.42 dB
3	400Hz	31.59 dB
4	500Hz	34.43 dB
5	630Hz	35.80 dB
6	800Hz	31.61 dB
7	1000Hz	32.63 dB
8	1250Hz	23.96 dB
9	1600Hz	23.89 dB
10	2000Hz	21.54 dB
11	2500Hz	28.11 dB
12	3150Hz	34.01 dB
13	4000Hz	31.45 dB
14	5000Hz	31.90 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.54dB at 2000Hz.

2024/4/19 17:28 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



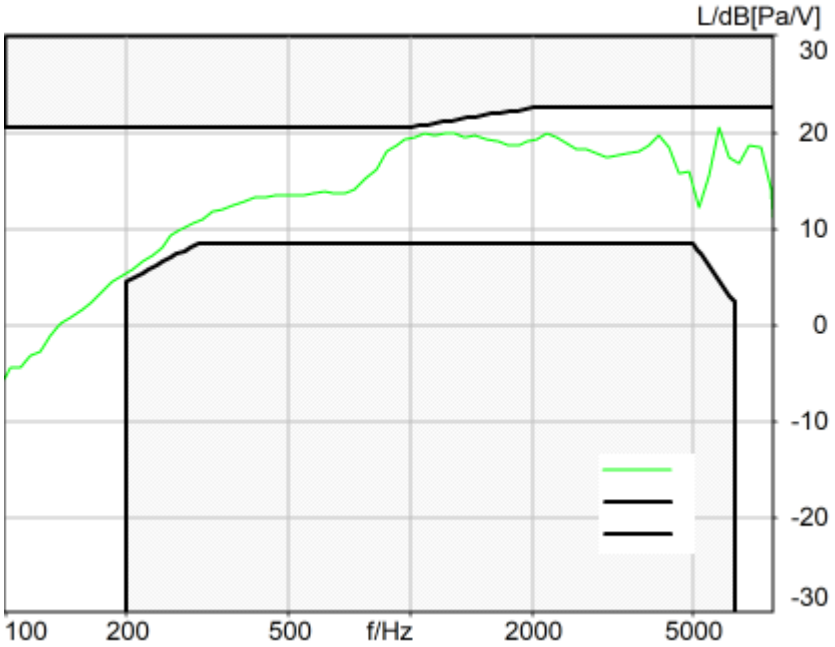
Absolute minimal distance
1.07 dB at 1285.9 Hz Ok

Ok

2024/4/19 17:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



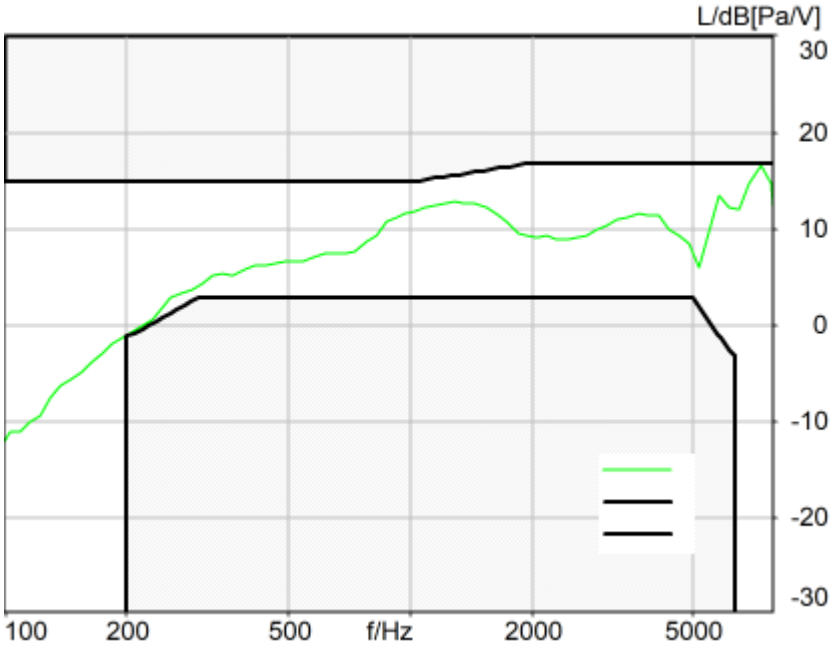
Absolute minimal distance
0.96 dB at 205.7 Hz Ok

Ok

2024/4/19 17:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



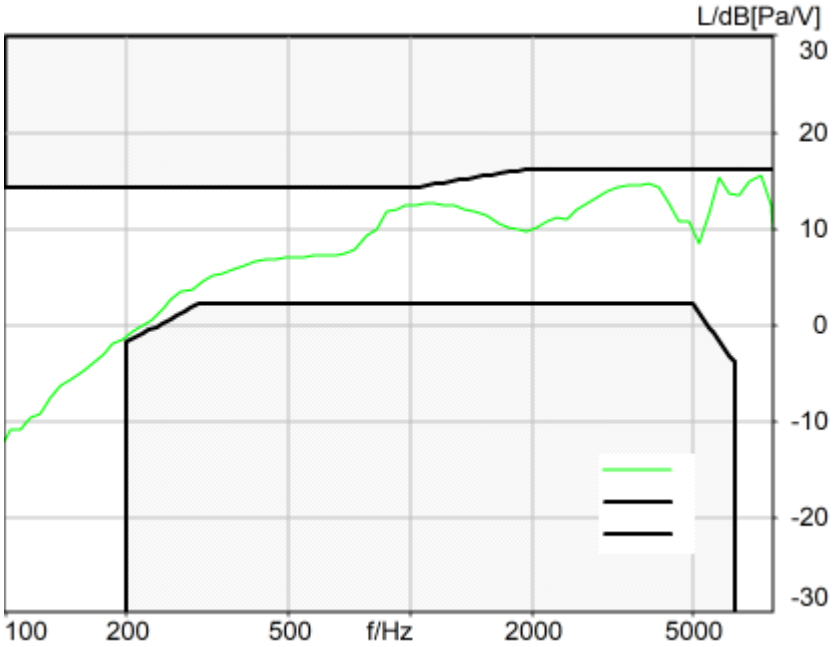
Absolute minimal distance
0.22 dB at 7315.0 Hz Ok

Ok

2024/4/19 17:30 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
0.72 dB at 7315.0 Hz Ok

Ok

2024/4/19 17:30 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

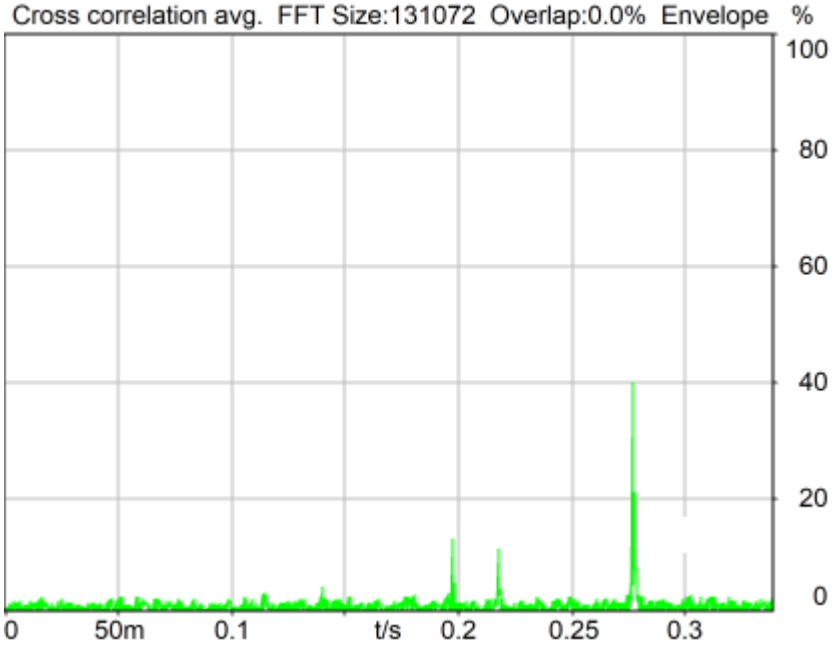
Measurement Object	WIFI 6G_802.11aX-HE20_EVS NB 24.4kbps_CH5
Project	CJWQ-W7L-P23120020 DTNC PM95

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

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

Overall Receive Delay NB, Index: 1

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

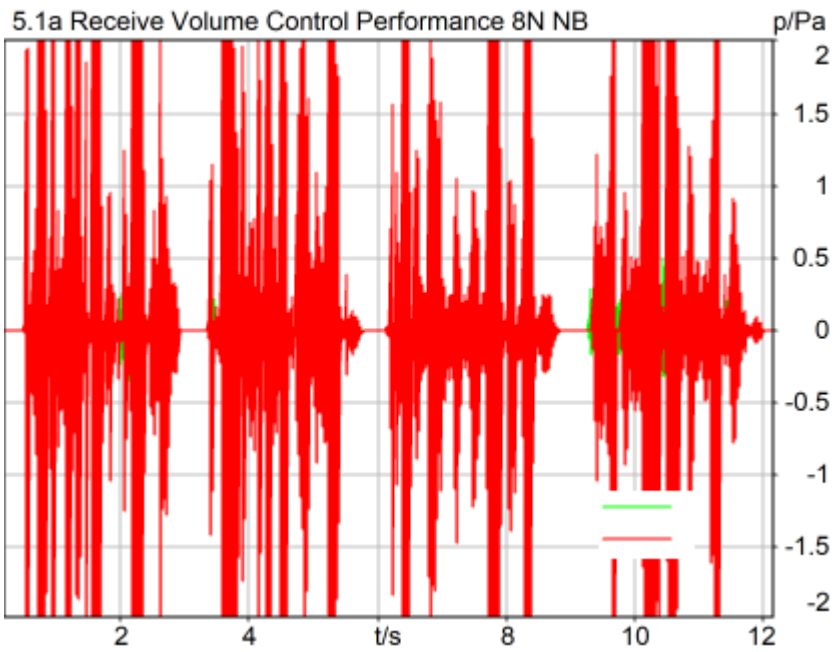


Channel	Delay
RCV*Source	277.6 ms

2024/5/15 14:47 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

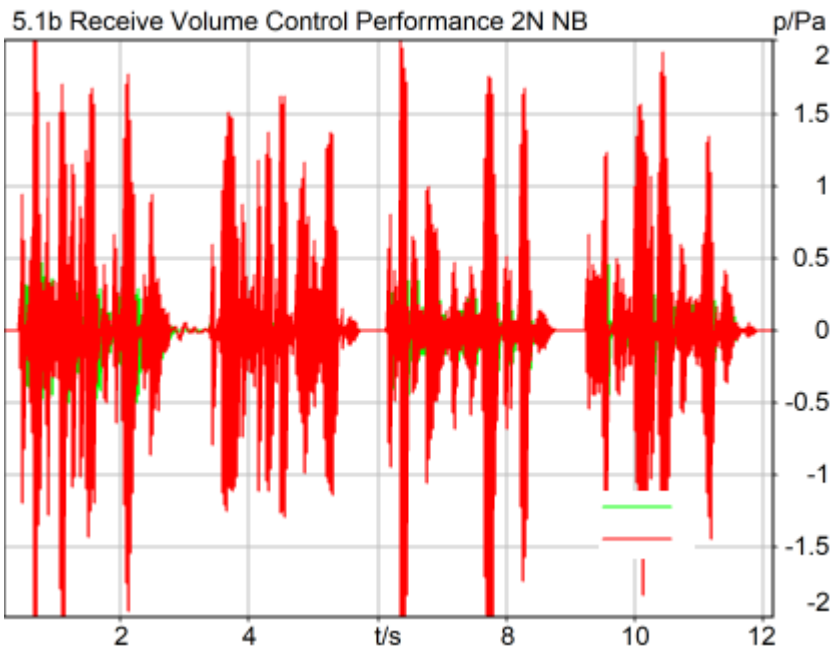
Channel	Speech level	Activity	Corrected speech level	
RCV	88.06 dB[SPL]	81.39%	18.06 dB[SPL]	Ok

Ok

2024/5/15 14:47 ACQUA 6.0.200

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

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



Correction

X - 70

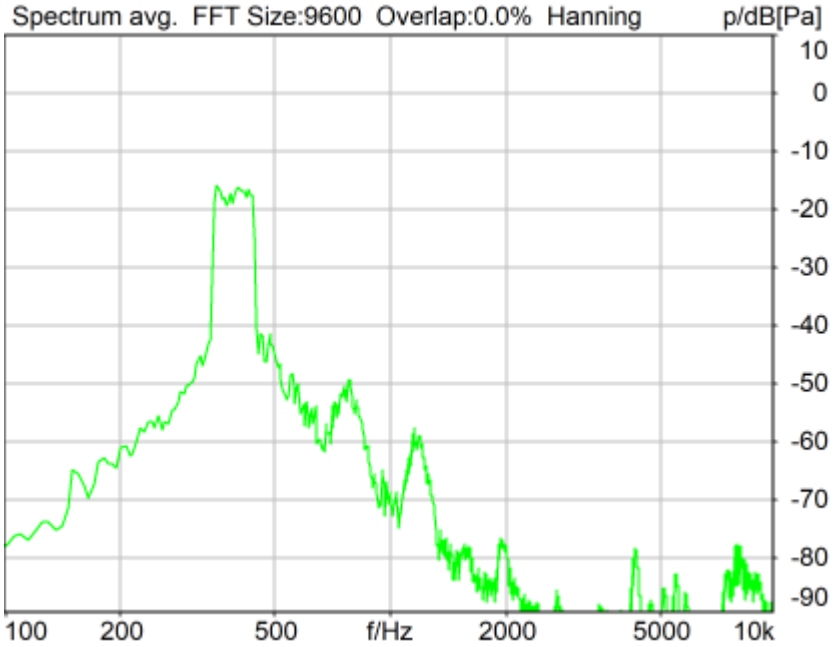
Channel	Speech level	Activity	Corrected speech level	
RCV	82.14 dB[SPL]	80.05%	12.14 dB[SPL]	Ok

Ok

2024/5/15 16:20 ACQUA 6.0.200

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

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



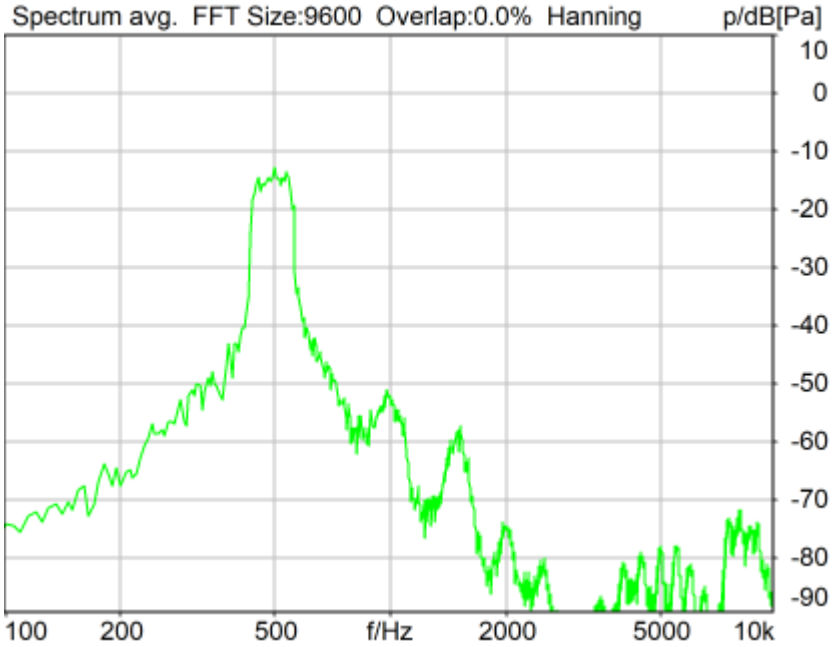
Distortion (Noise) RCV (packed): 29.55 dB (3.33%) Ok

Ok

2024/5/15 14:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



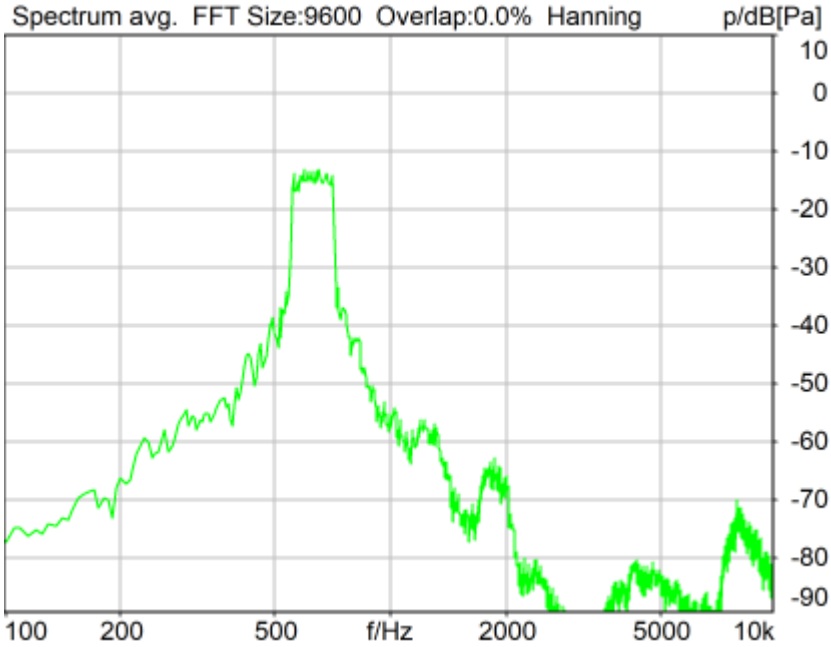
Distortion (Noise) RCV (packed): 29.21 dB (3.47%) Ok

Ok

2024/5/15 14:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



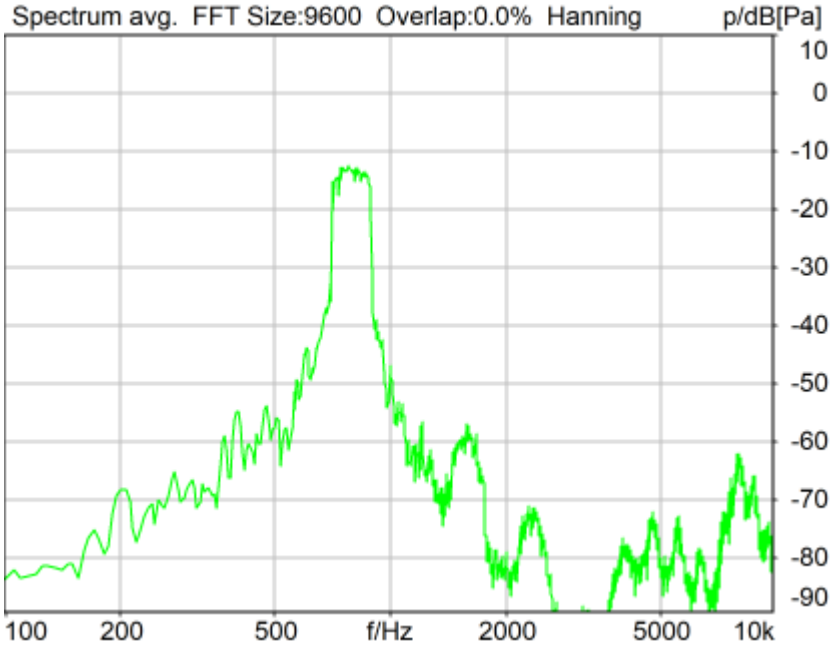
Distortion (Noise) RCV (packed): 27.32 dB (4.31%) Ok

Ok

2024/5/15 14:48 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



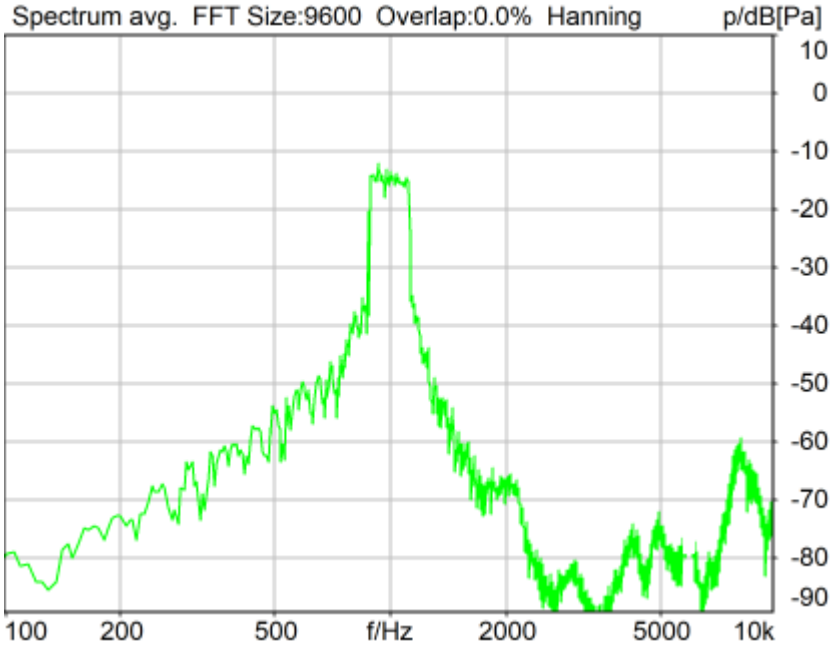
Distortion (Noise) RCV (packed): 31.55 dB (2.65%) Ok

Ok

2024/5/15 14:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



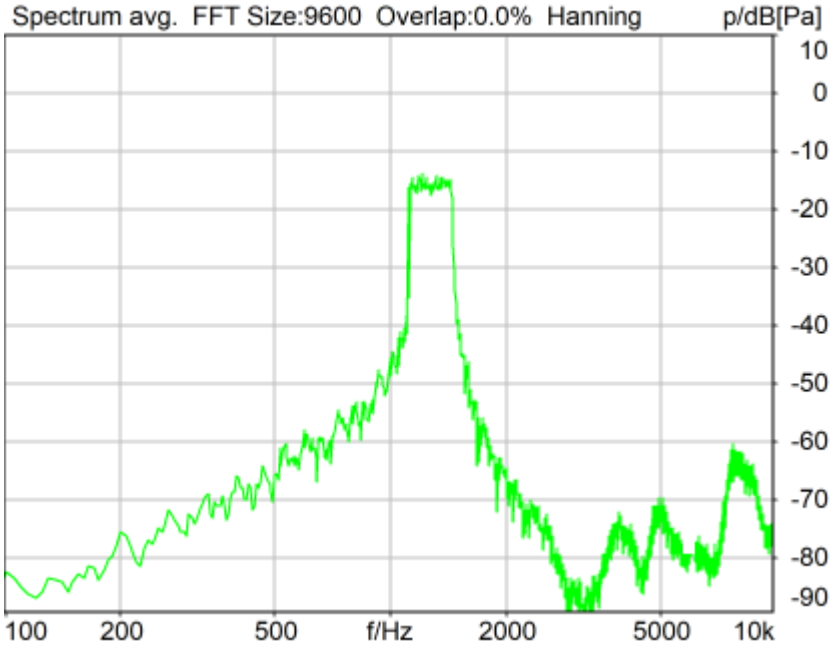
Distortion (Noise) RCV (packed): 26.89 dB (4.52%) Ok

Ok

2024/5/15 14:49 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



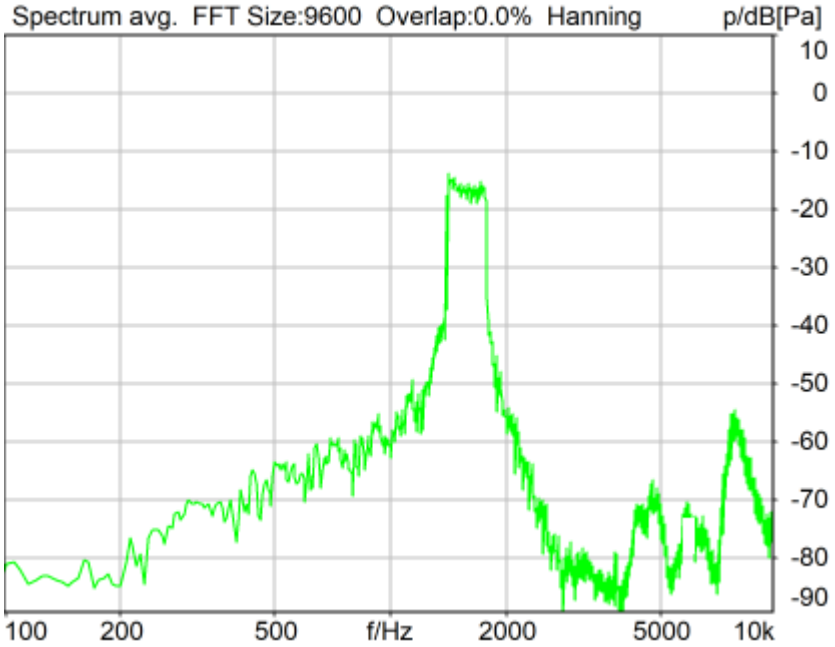
Distortion (Noise) RCV (packed): 23.54 dB (6.66%) Ok

Ok

2024/5/15 14:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



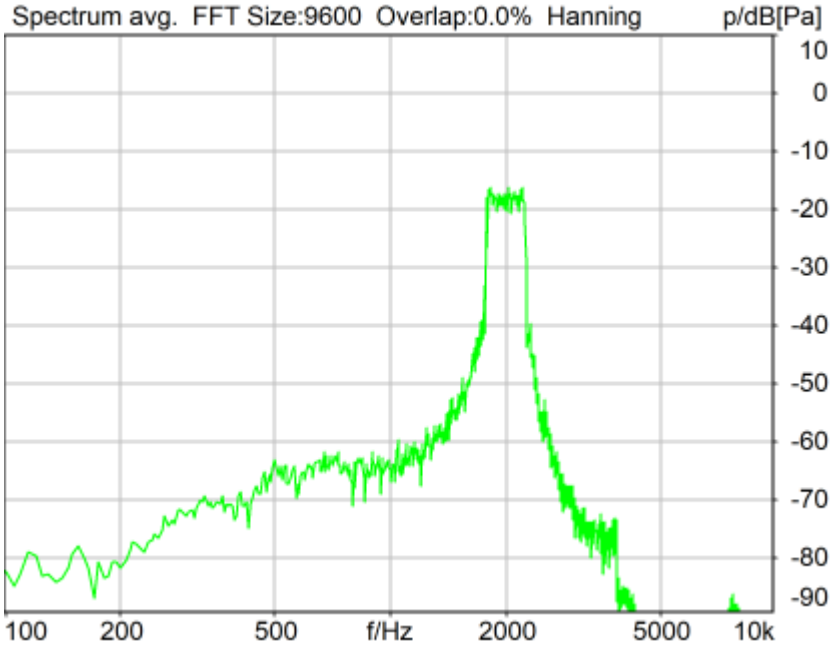
Distortion (Noise) RCV (packed): 28.21 dB (3.89%) Ok

Ok

2024/5/15 14:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



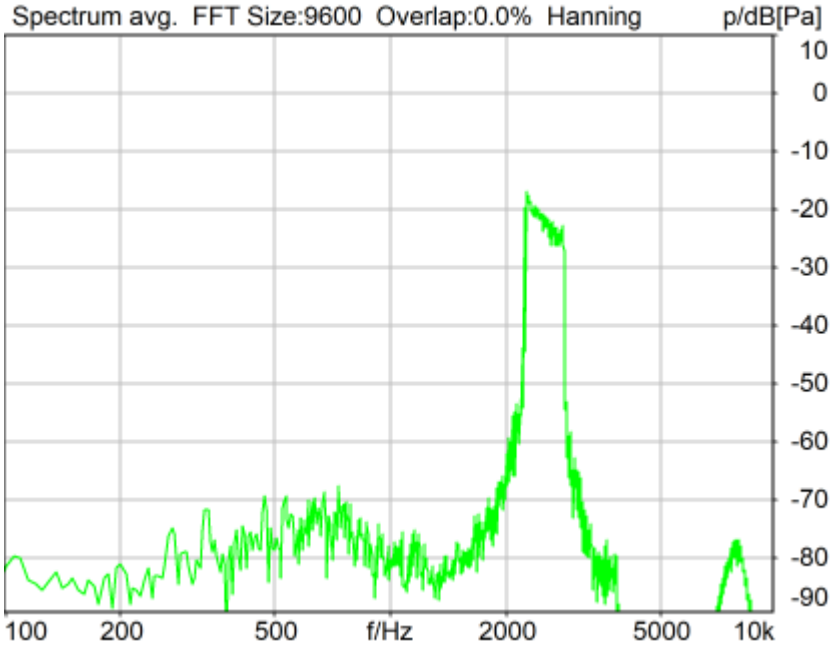
Distortion (Noise) RCV (packed): 26.77 dB (4.59%) Ok

Ok

2024/5/15 14:50 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



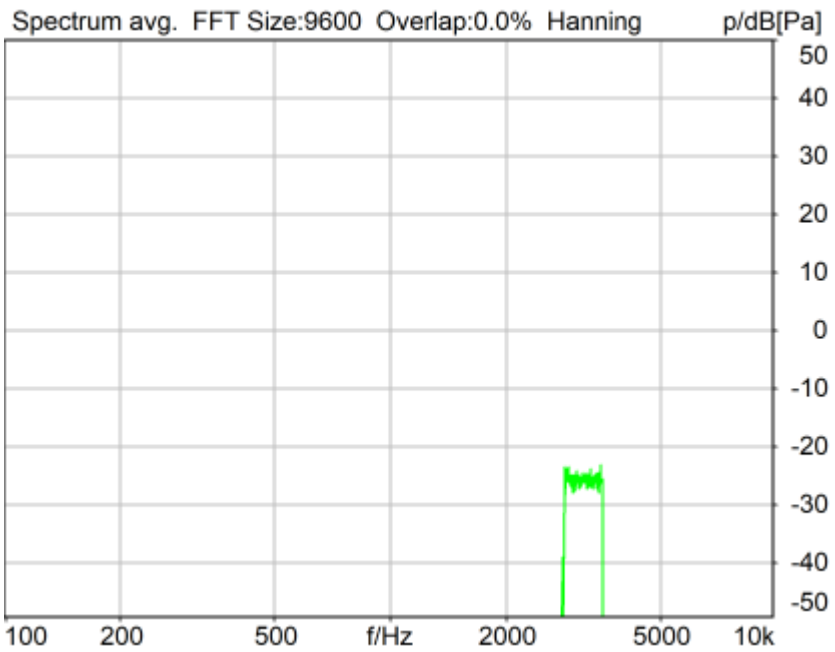
Distortion (Noise) RCV (packed): 37.21 dB (1.38%) Ok

Ok

2024/5/15 14:51 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 37.23 dB (1.38%) Ok

Ok

2024/5/15 14:51 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

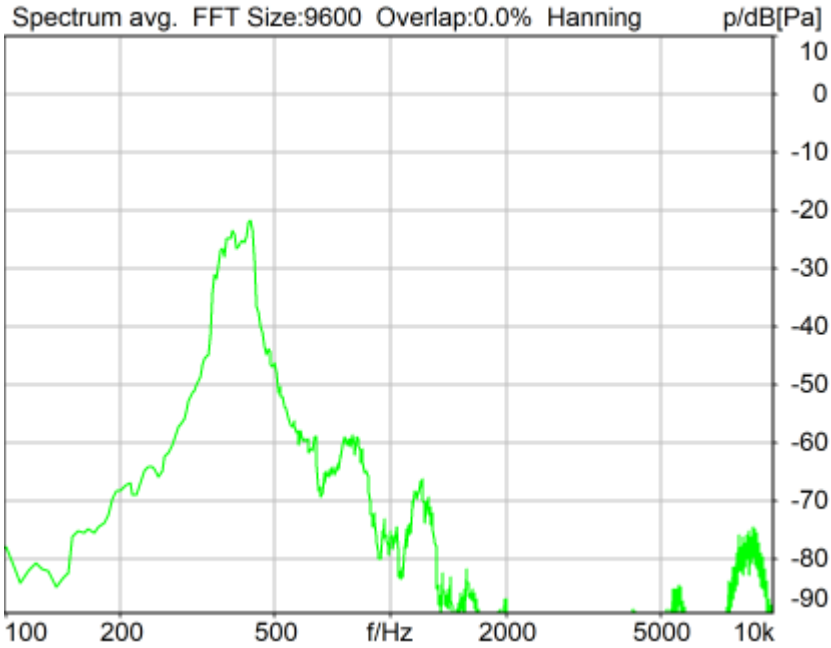
Region	Frequency	SDNR
1	400Hz	29.55 dB
2	500Hz	29.21 dB
3	630Hz	27.32 dB
4	800Hz	31.55 dB
5	1000Hz	26.89 dB
6	1250Hz	23.54 dB
7	1600Hz	28.21 dB
8	2000Hz	26.77 dB
9	2500Hz	37.21 dB
10	3150Hz	37.23 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.54dB at 1250Hz.

2024/5/15 14:51 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



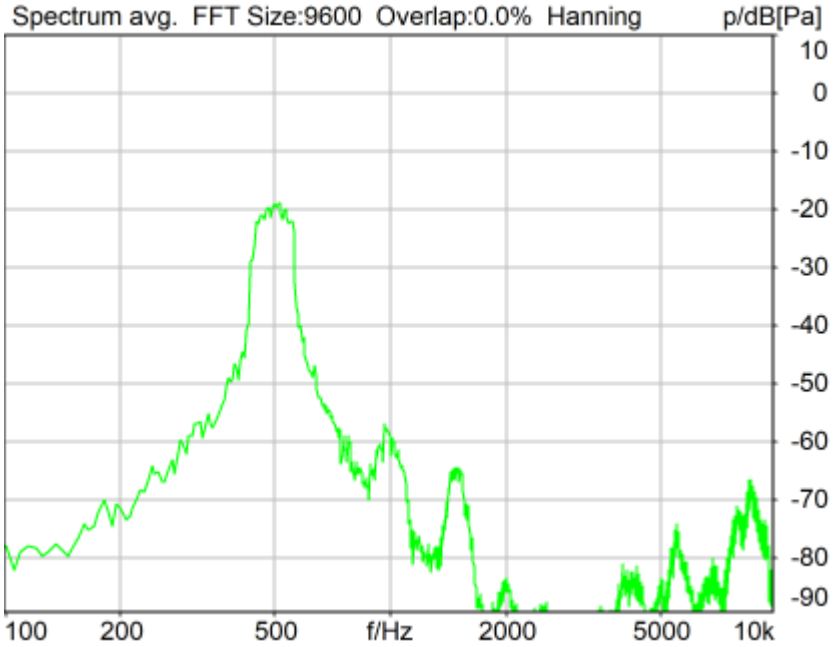
Distortion (Noise) RCV (packed): 26.89 dB (4.53%) Ok

Ok

2024/5/15 16:20 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



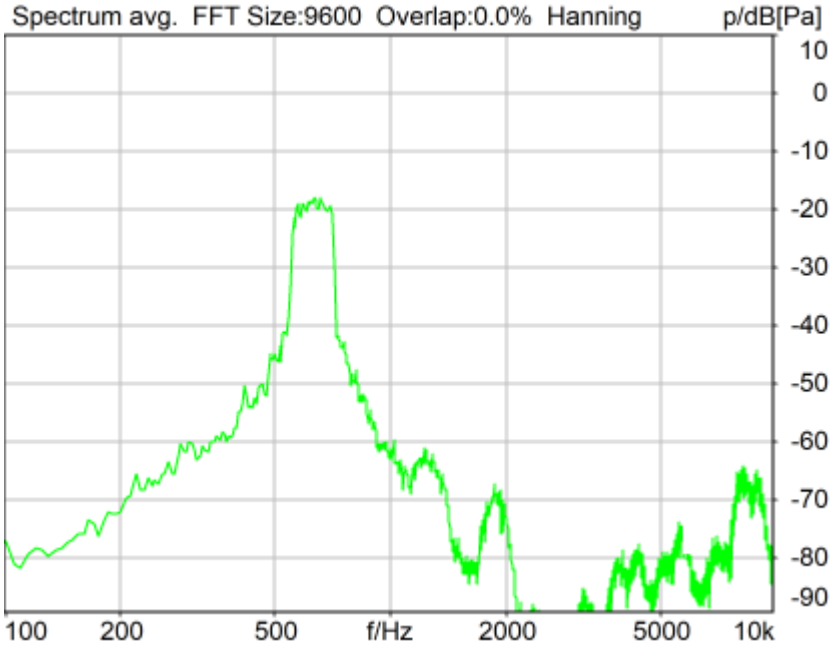
Distortion (Noise) RCV (packed): 28.99 dB (3.55%) Ok

Ok

2024/5/15 16:20 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



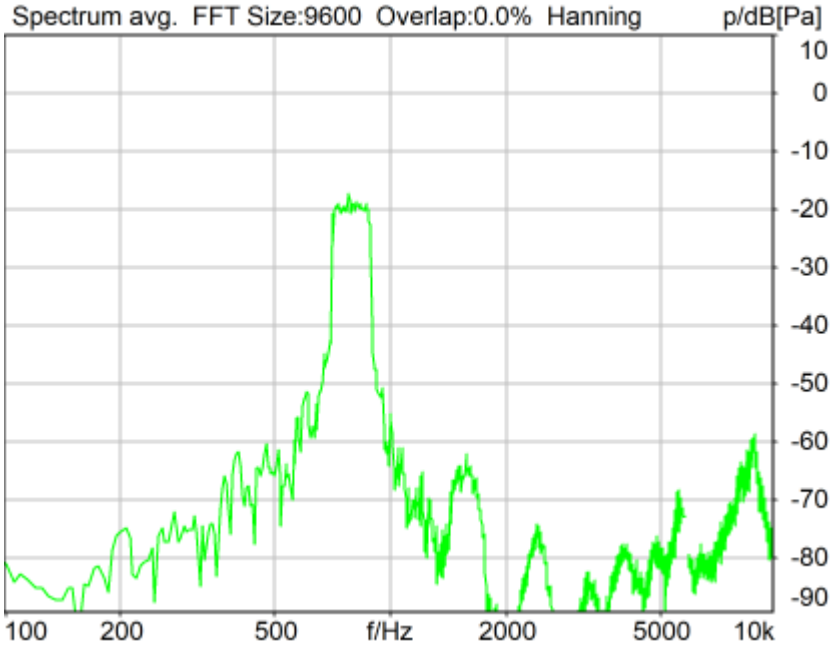
Distortion (Noise) RCV (packed): 28.01 dB (3.98%) Ok

Ok

2024/5/15 16:21 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



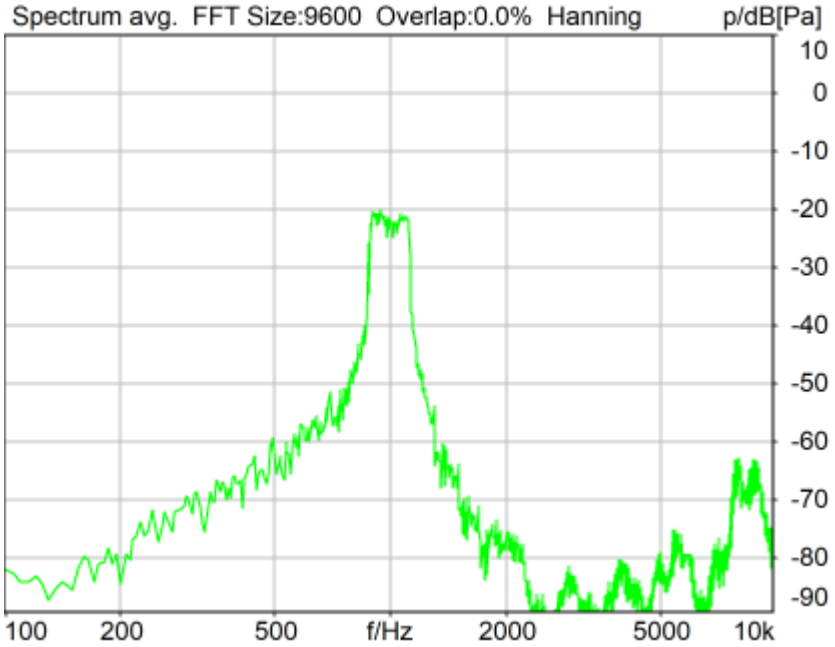
Distortion (Noise) RCV (packed): 32.48 dB (2.38%) Ok

Ok

2024/5/15 16:21 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



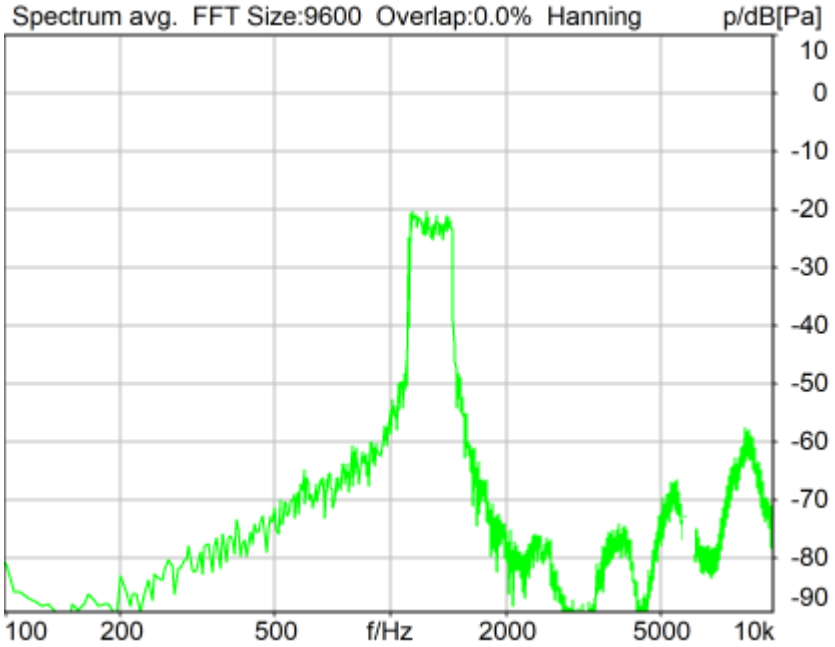
Distortion (Noise) RCV (packed): 26.00 dB (5.01%) Ok

Ok

2024/5/15 16:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



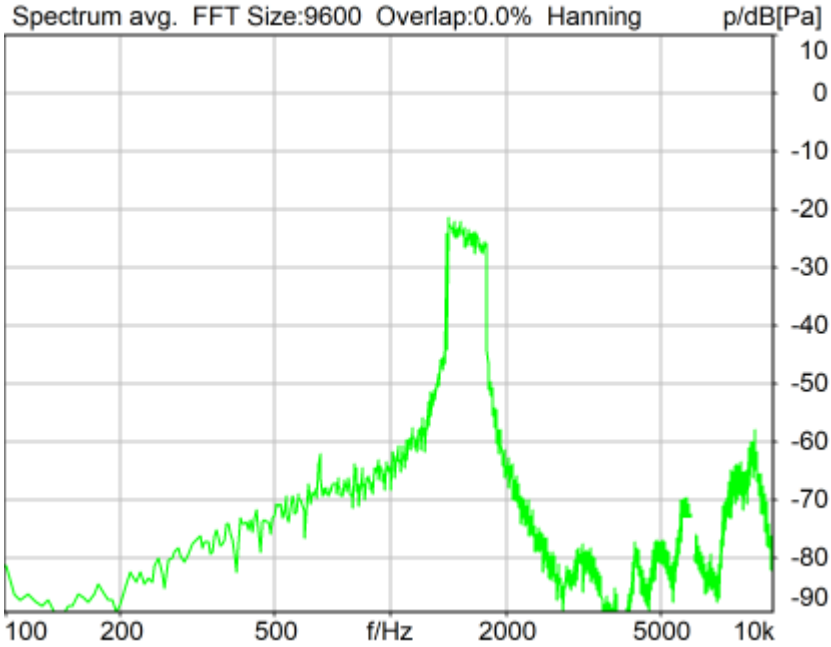
Distortion (Noise) RCV (packed): 27.12 dB (4.40%) Ok

Ok

2024/5/15 16:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



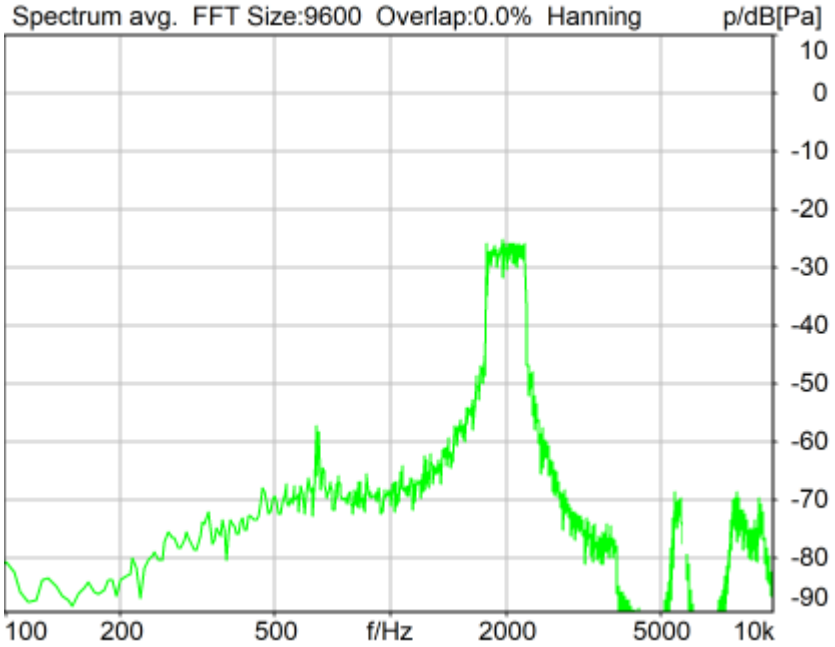
Distortion (Noise) RCV (packed): 27.01 dB (4.46%) Ok

Ok

2024/5/15 16:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



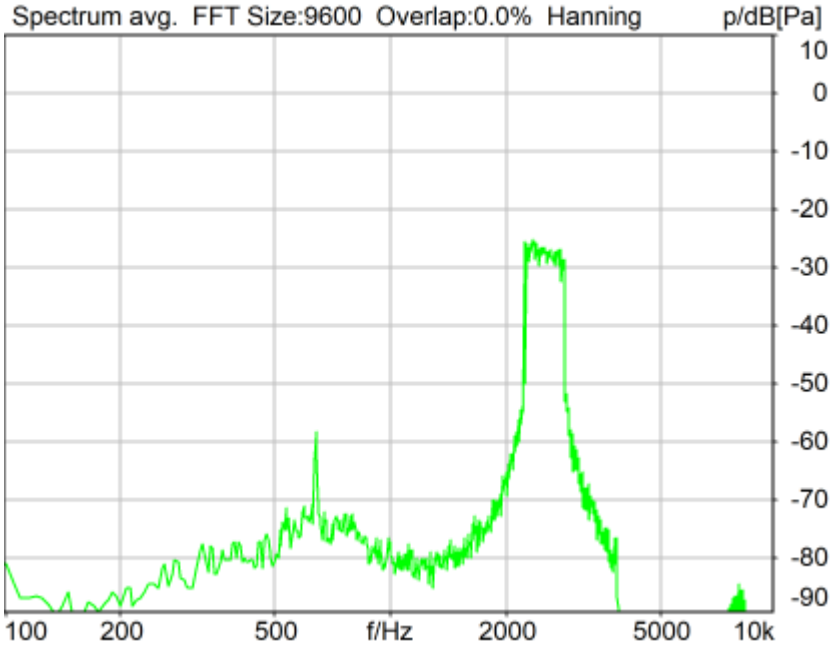
Distortion (Noise) RCV (packed): 23.94 dB (6.36%) Ok

Ok

2024/5/15 16:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



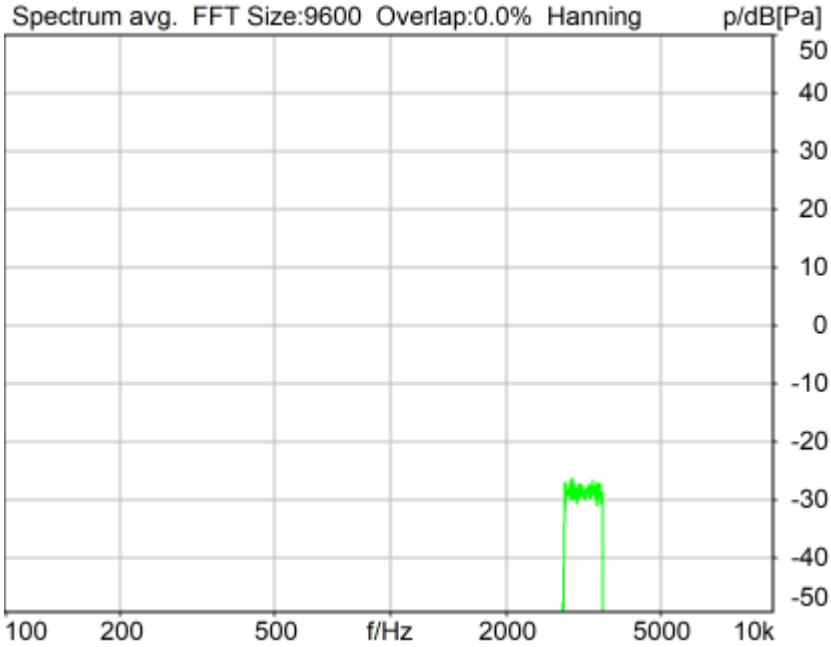
Distortion (Noise) RCV (packed): 30.92 dB (2.85%) Ok

Ok

2024/5/15 16:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Distortion (Noise) RCV (packed): 32.31 dB (2.42%) Ok

Ok

2024/5/15 16:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

Region	Frequency	SDNR
1	400Hz	26.89 dB

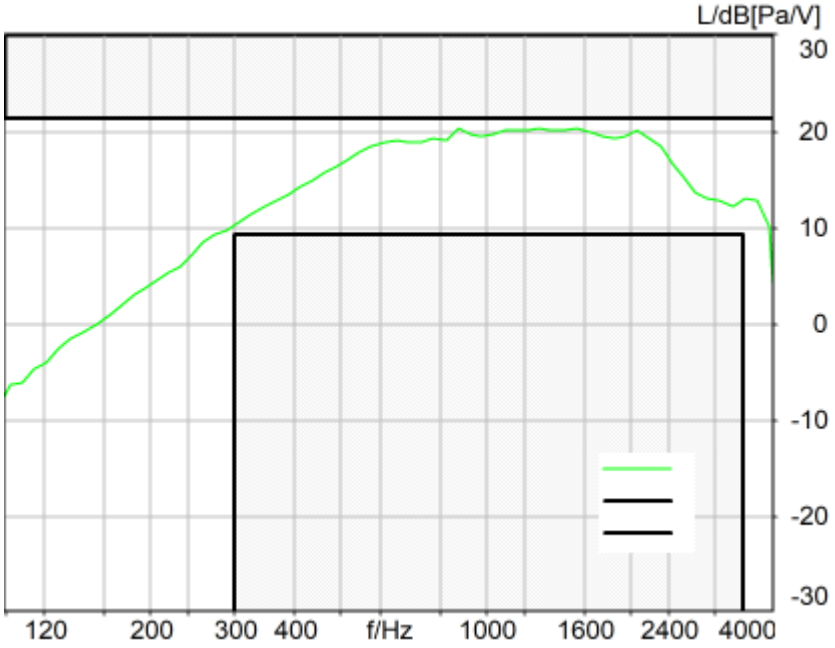
2	500Hz	28.99 dB
3	630Hz	28.01 dB
4	800Hz	32.48 dB
5	1000Hz	26.00 dB
6	1250Hz	27.12 dB
7	1600Hz	27.01 dB
8	2000Hz	23.94 dB
9	2500Hz	30.92 dB
10	3150Hz	32.31 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 23.94dB at 2000Hz.

2024/5/15 16:24 ACQUA

5.3 Frequency Response 8N FF HANB, Index: 1

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



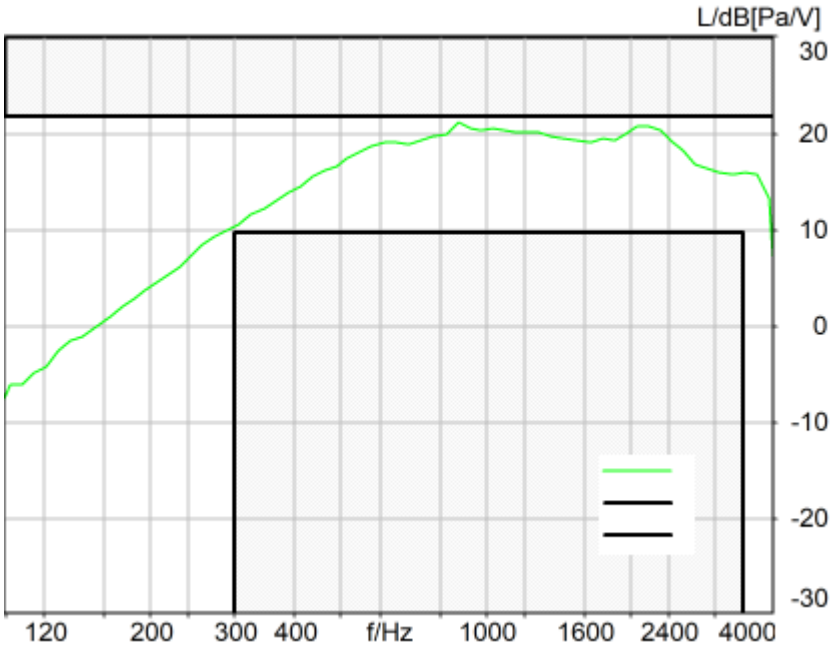
Absolute minimal distance
1.09 dB at 1285.9 Hz Ok

Ok

2024/5/15 14:52 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF HANB, Index: 1

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



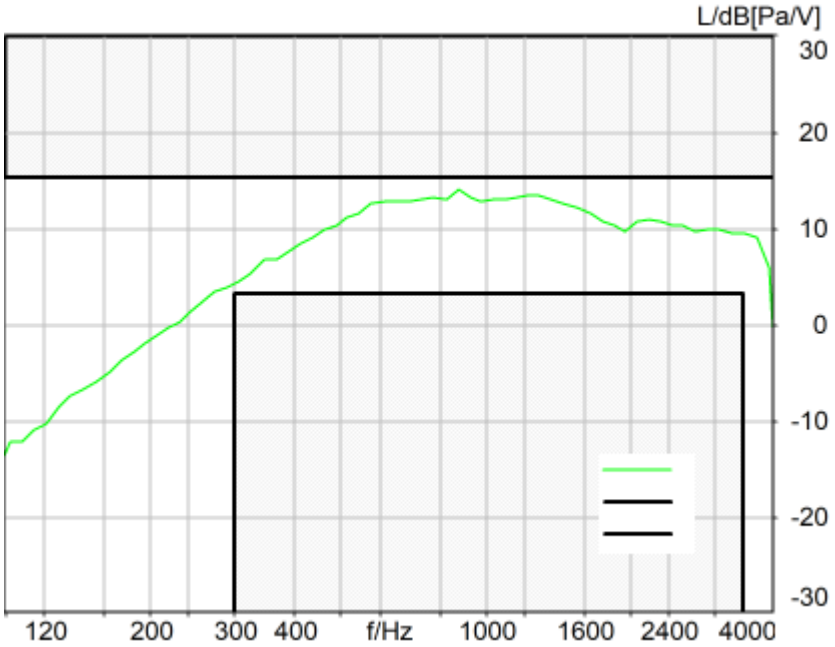
Absolute minimal distance
0.70 dB at 873.9 Hz Ok

Ok

2024/5/15 14:52 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF HANB, Index: 1

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



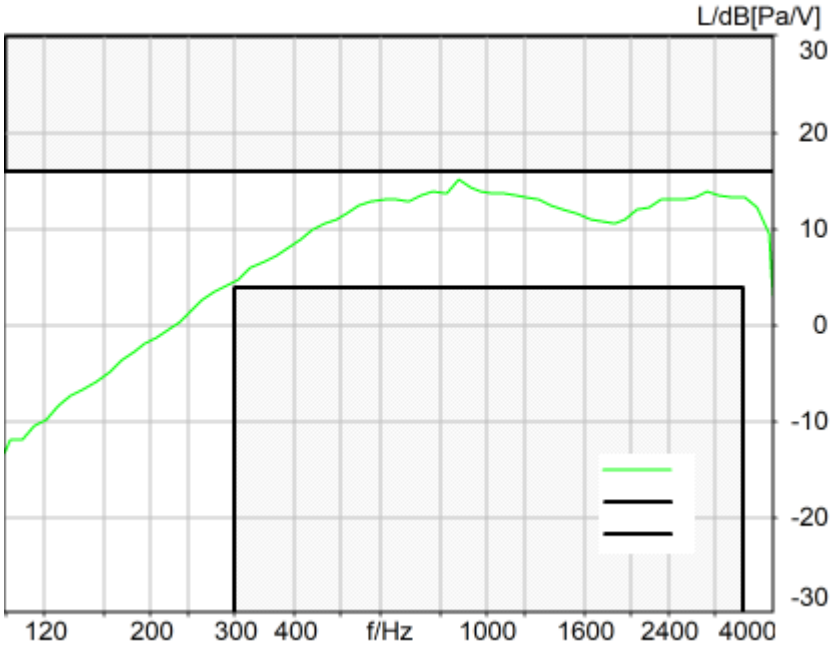
Absolute minimal distance
1.25 dB at 873.9 Hz Ok

Ok

2024/5/15 16:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N DF HANB, Index: 1

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



Absolute minimal distance
0.88 dB at 873.9 Hz Ok

Ok

2024/5/15 16:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

Measurement Protocol

Measurement Object	WIFI 6G_802.11aX-HE20_EVS WB 128kbps_CH5
Description	CJWQ-W7L-P23120020 DTNC PM95

Project	TIA-5050 (2018-01)
Report Generation Date	2024/5/27 12:10
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
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5.2 RCV Distortion and Noise - 315 Hz WB, Index: 1 6
5.2 RCV Distortion and Noise - 400 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 500 Hz WB, Index: 1 7
5.2 RCV Distortion and Noise - 630 Hz WB, Index: 1 8
5.2 RCV Distortion and Noise - 800 Hz WB, Index: 1 9
5.2 RCV Distortion and Noise - 1000 Hz WB, Index: 1 9
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
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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
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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
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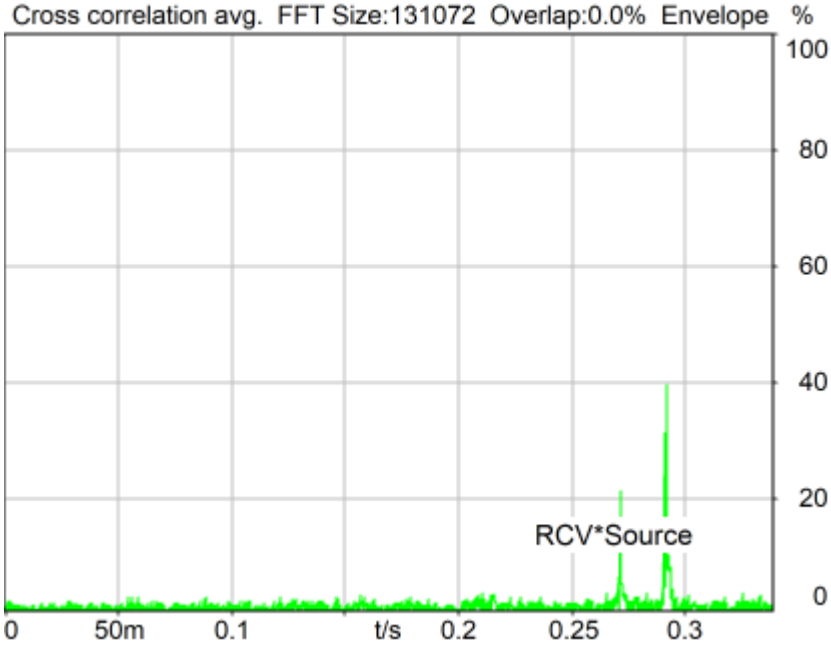
5.3 Frequency Response 8N FF, Index: 1 25
5.3 Frequency Response 8N DF, Index: 1 26
5.3 Frequency Response 2N FF, Index: 1 27
5.3 Frequency Response 2N DF, Index: 1 28

Overall Receive Delay WB, Index: 1

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

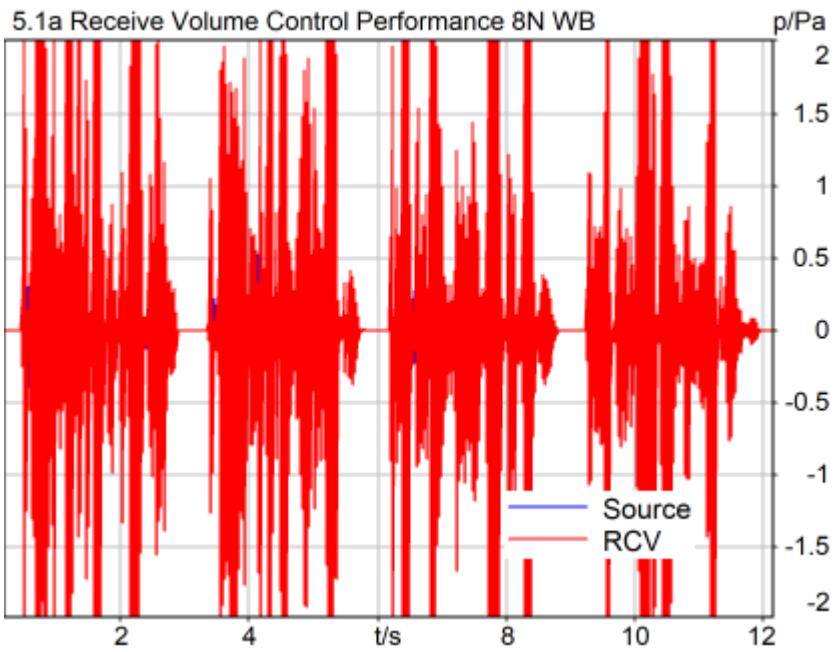


Channel	Delay
RCV*Source	291.7 ms

2024/5/16 13:17 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



Correction

X - 70

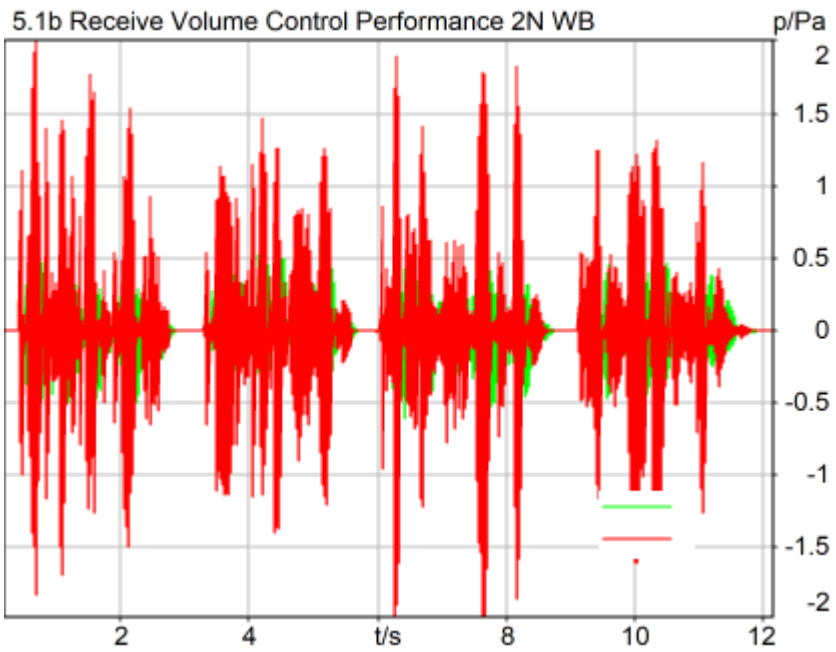
Channel	Speech level	Activity	Corrected speech level	
RCV	86.95 dB[SPL]	84.51%	16.95 dB[SPL]	Ok

Ok

2024/5/16 13:18 ACQUA 6.0.200

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

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



Correction

X - 70

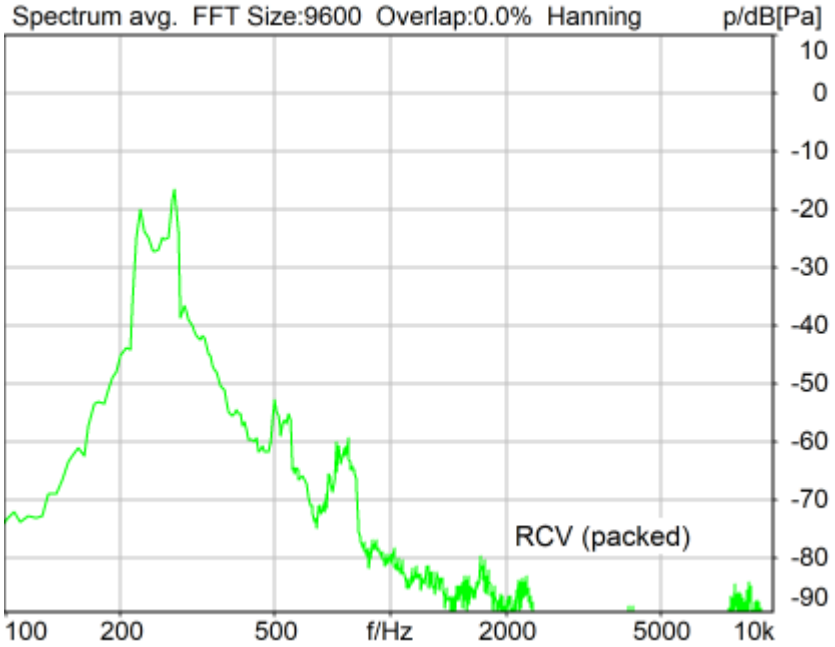
Channel	Speech level	Activity	Corrected speech level	
RCV	80.55 dB[SPL]	83.34%	10.55 dB[SPL]	Ok

Ok

2024/5/15 16:36 ACQUA 6.0.200

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

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



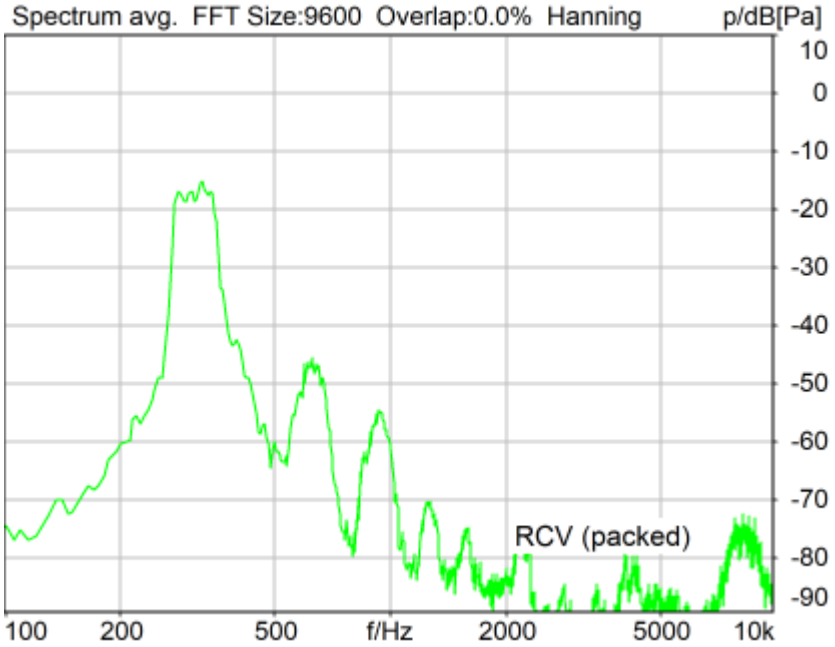
Distortion (Noise) RCV (packed): 27.96 dB (4.00%) Ok

Ok

2024/5/16 13:18 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



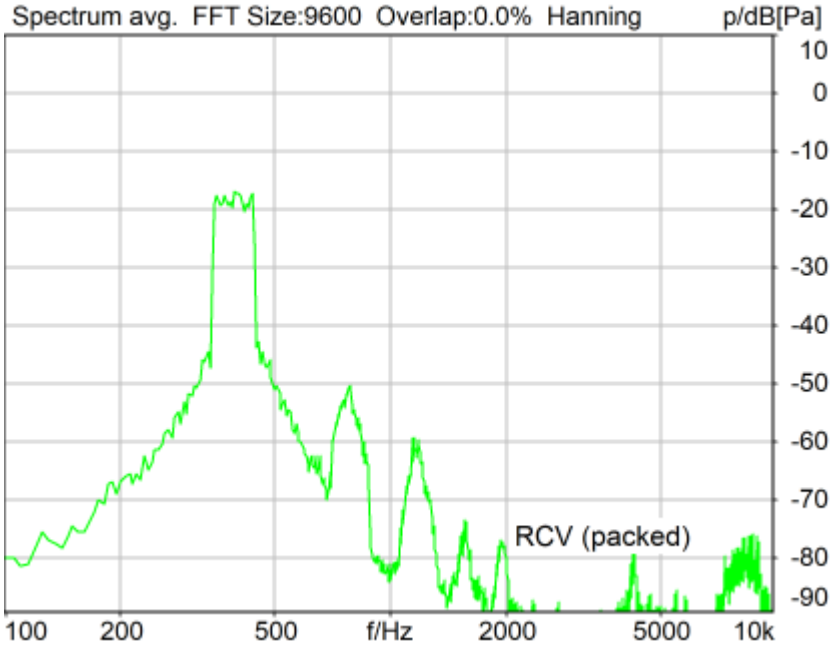
Distortion (Noise) RCV (packed): 29.07 dB (3.52%) Ok

Ok

2024/5/16 13:19 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



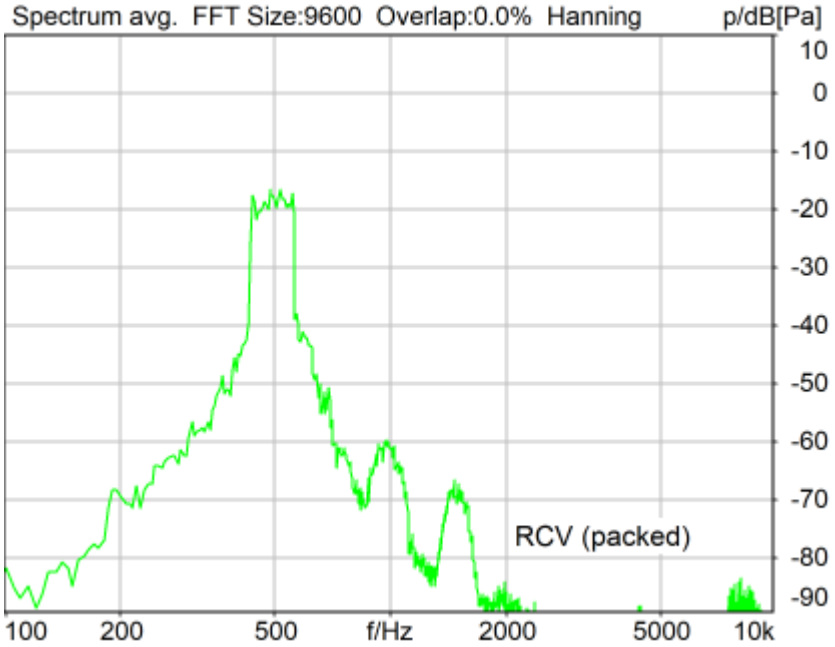
Distortion (Noise) RCV (packed): 31.99 dB (2.51%) Ok

Ok

2024/5/16 13:19 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



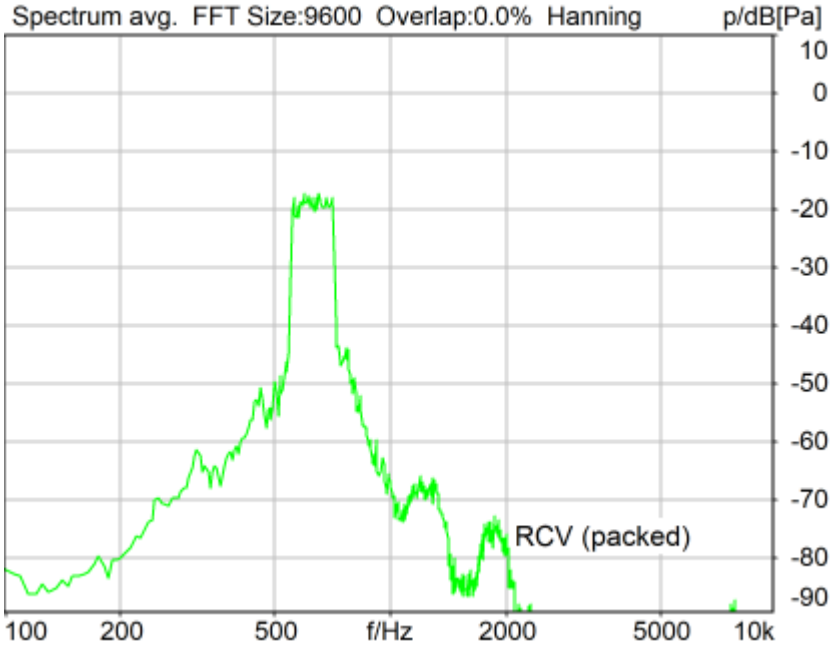
Distortion (Noise) RCV (packed): 30.05 dB (3.15%) Ok

Ok

2024/5/16 13:20 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



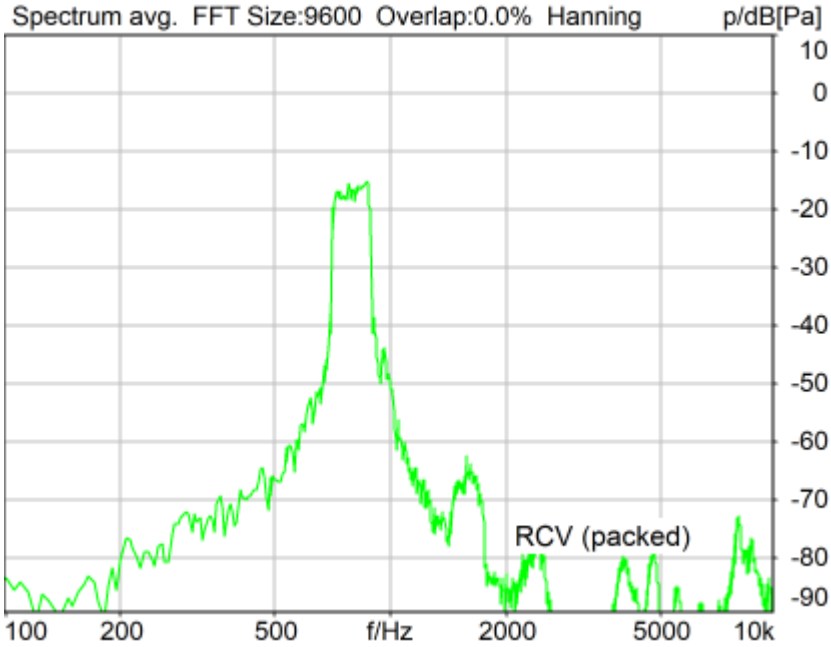
Distortion (Noise) RCV (packed): 31.27 dB (2.73%) Ok

Ok

2024/5/16 13:20 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



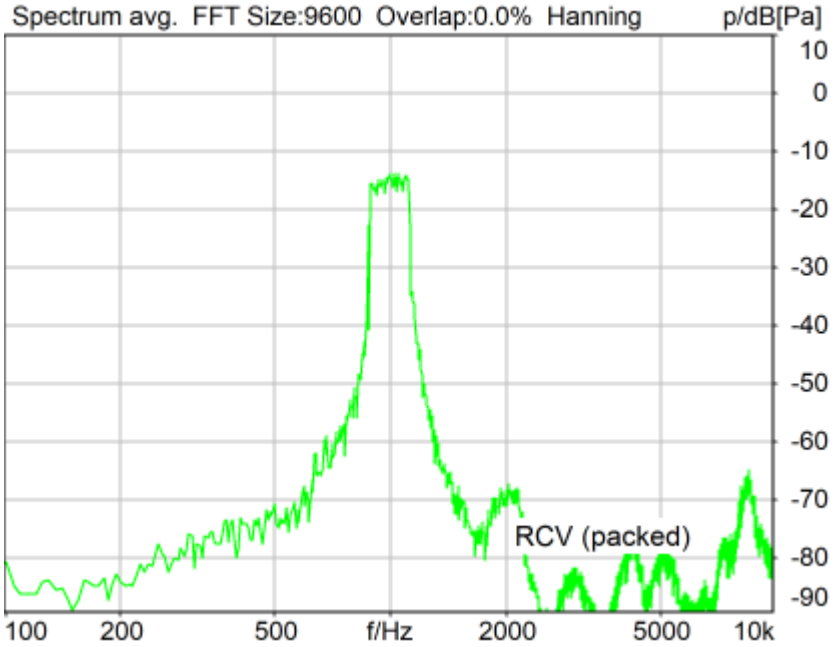
Distortion (Noise) RCV (packed): 32.39 dB (2.40%) Ok

Ok

2024/5/16 13:20 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



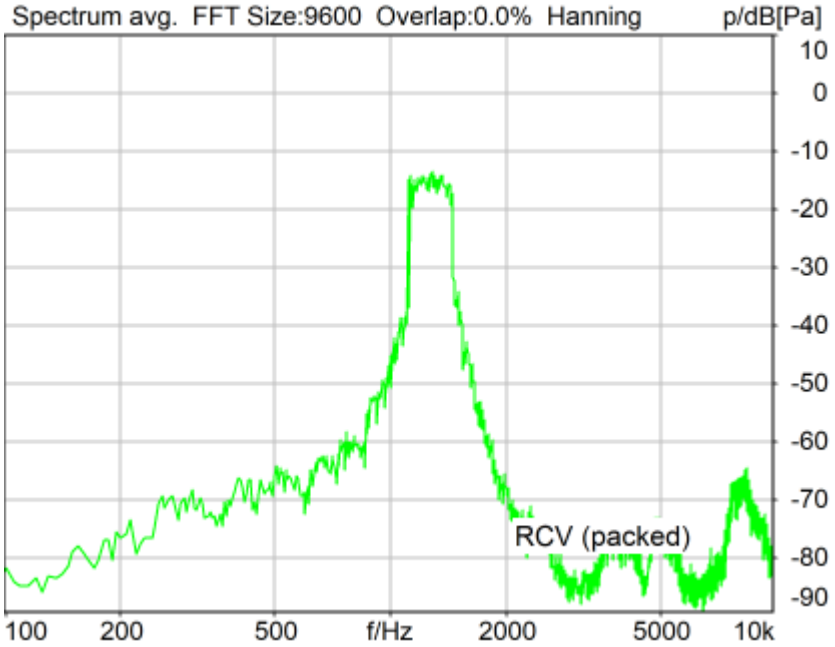
Distortion (Noise) RCV (packed): 32.79 dB (2.29%) Ok

Ok

2024/5/16 13:21 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



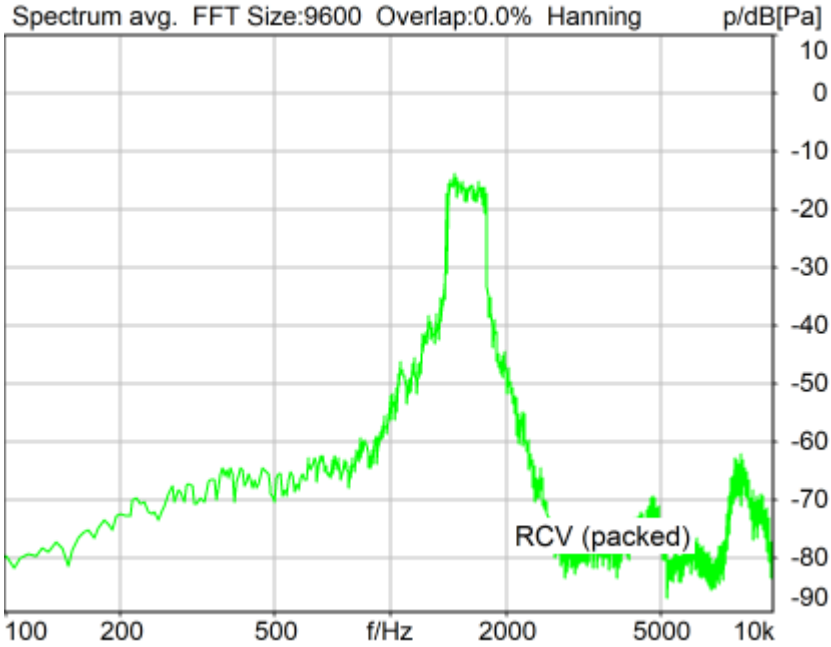
Distortion (Noise) RCV (packed): 24.12 dB (6.22%) Ok

Ok

2024/5/16 13:21 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



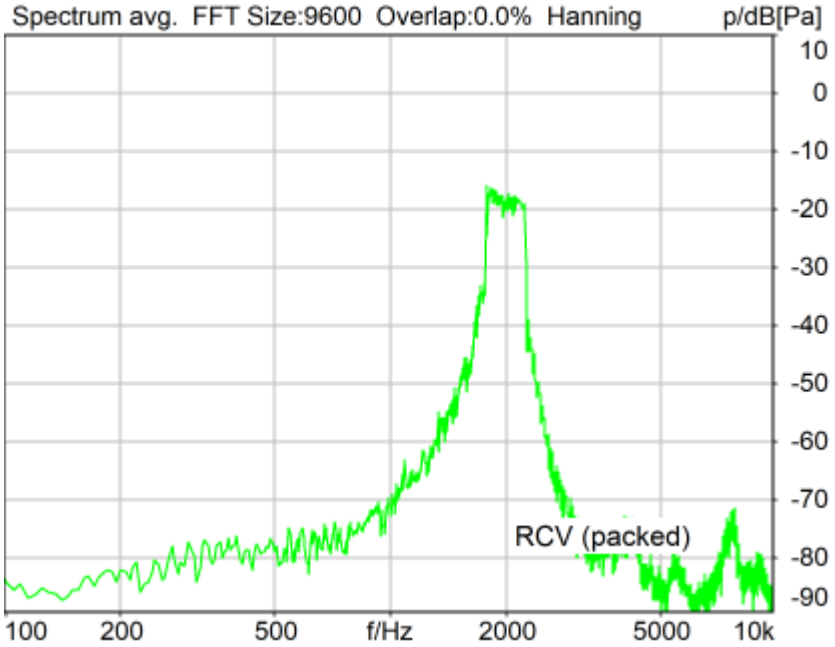
Distortion (Noise) RCV (packed): 23.75 dB (6.50%) Ok

Ok

2024/5/16 13:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



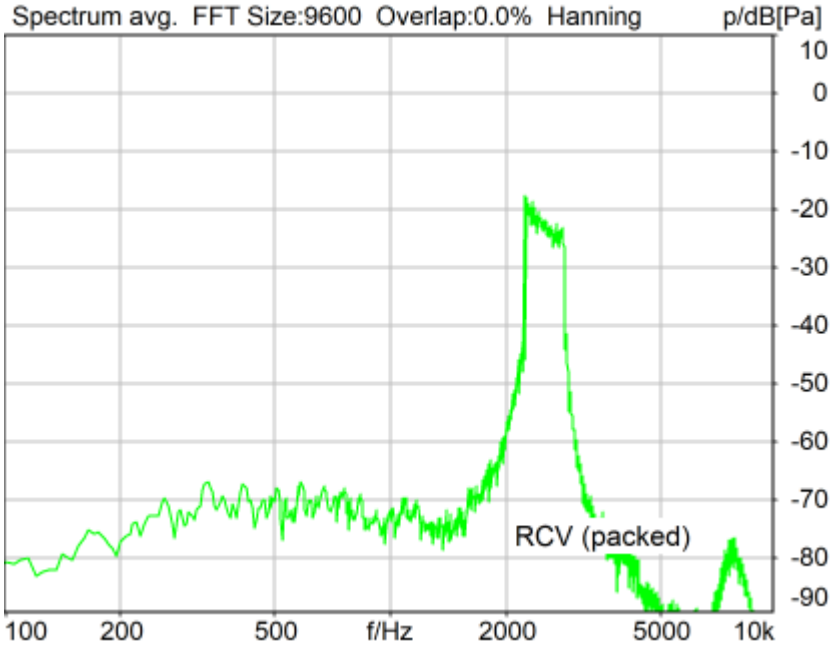
Distortion (Noise) RCV (packed): 22.39 dB (7.60%) Ok

Ok

2024/5/16 13:22 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



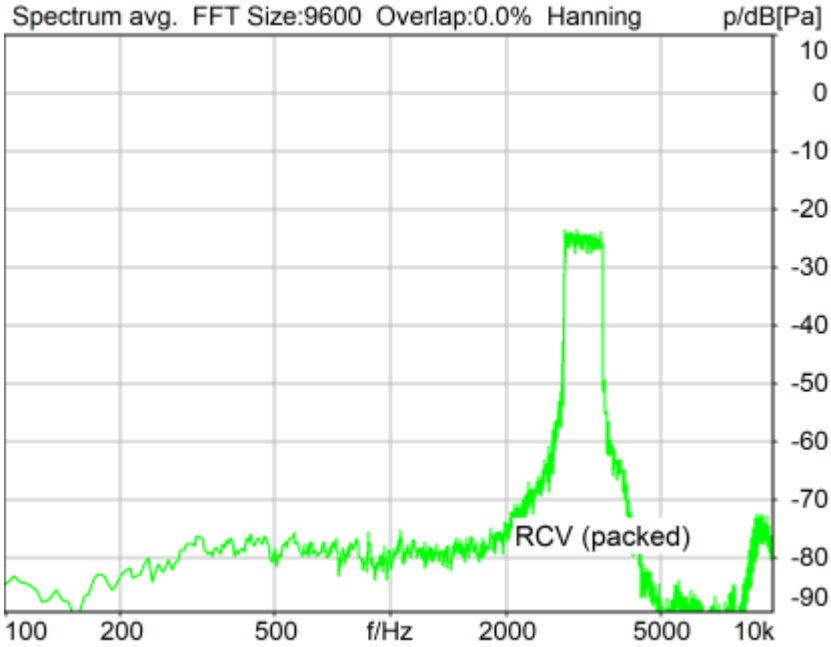
Distortion (Noise) RCV (packed): 28.48 dB (3.77%) Ok

Ok

2024/5/16 13:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



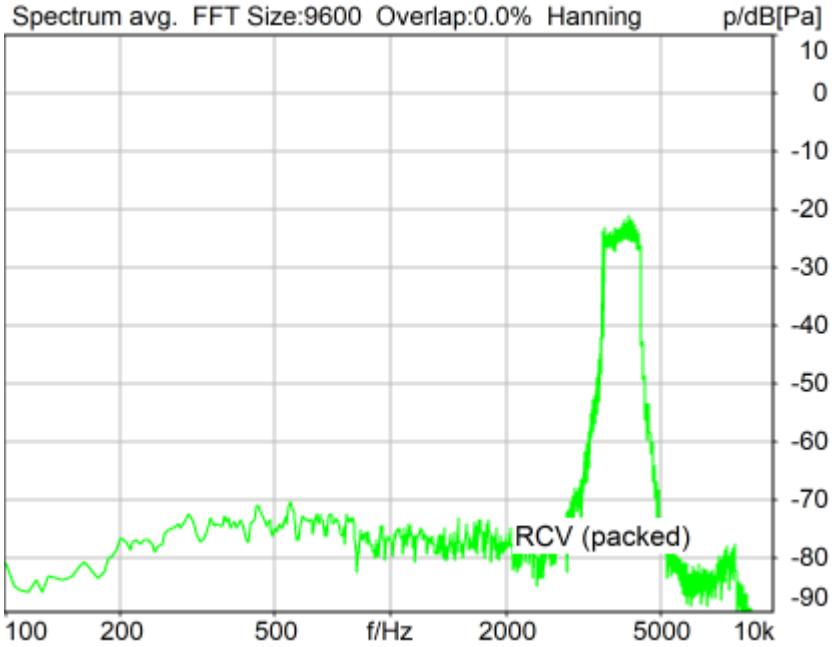
Distortion (Noise) RCV (packed): 32.62 dB (2.34%) Ok

Ok

2024/5/16 13:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



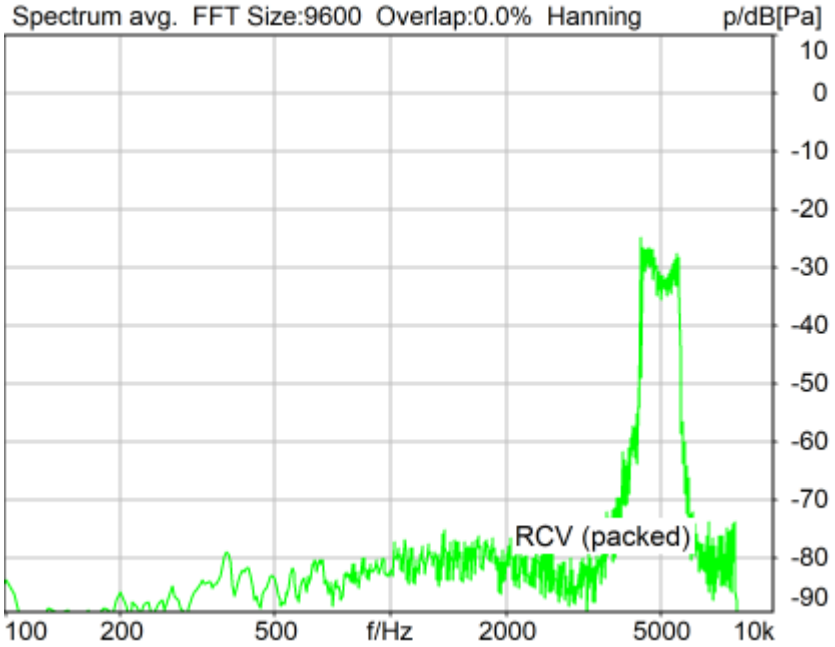
Distortion (Noise) RCV (packed): 28.81 dB (3.63%) Ok

Ok

2024/5/16 13:23 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



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

Ok

2024/5/16 13:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

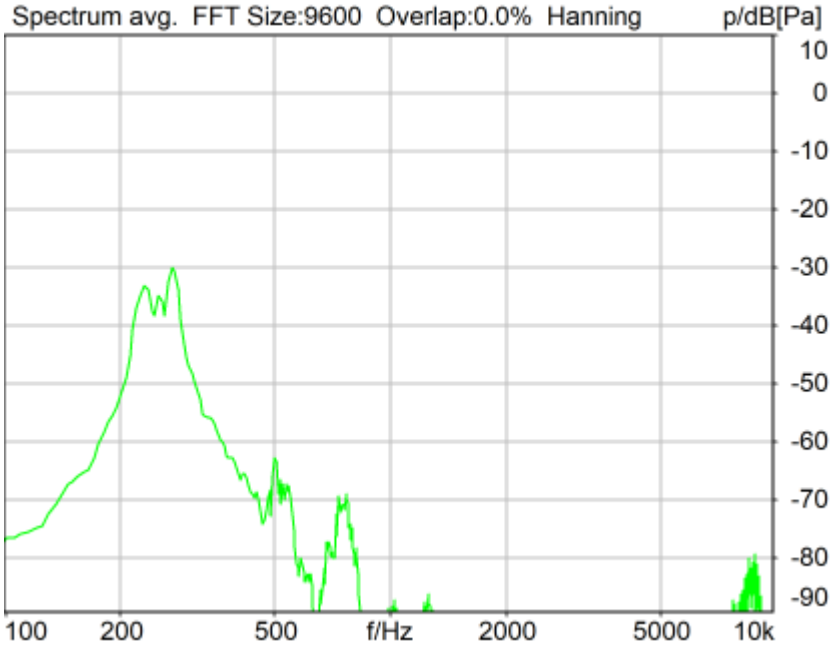
Region	Frequency	SDNR
1	250Hz	27.96 dB
2	315Hz	29.07 dB
3	400Hz	31.99 dB
4	500Hz	30.05 dB
5	630Hz	31.27 dB
6	800Hz	32.39 dB
7	1000Hz	32.79 dB
8	1250Hz	24.12 dB
9	1600Hz	23.75 dB
10	2000Hz	22.39 dB
11	2500Hz	28.48 dB
12	3150Hz	32.62 dB
13	4000Hz	28.81 dB
14	5000Hz	30.81 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.39dB at 2000Hz.

2024/5/16 13:24 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



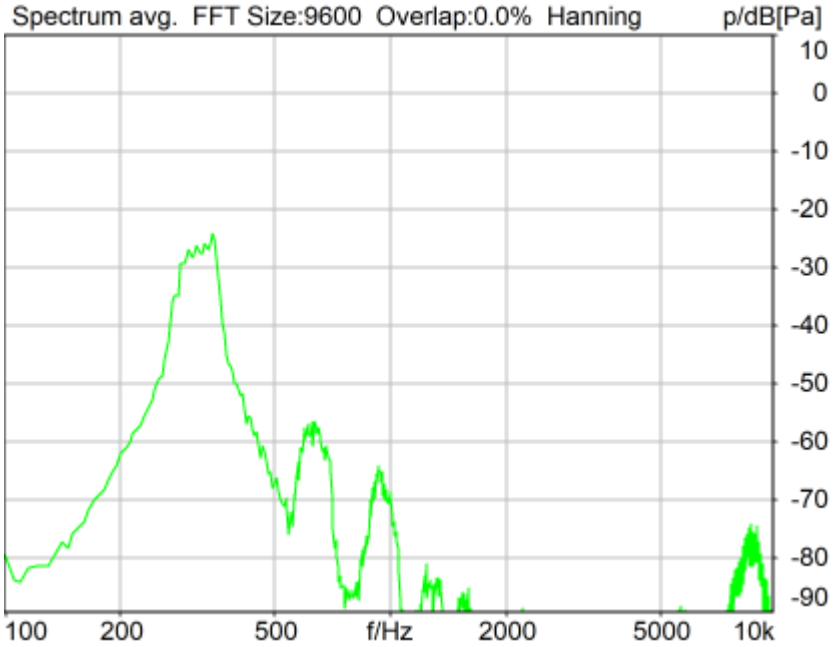
Distortion (Noise) RCV (packed): 27.06 dB (4.44%) Ok

Ok

2024/5/15 16:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



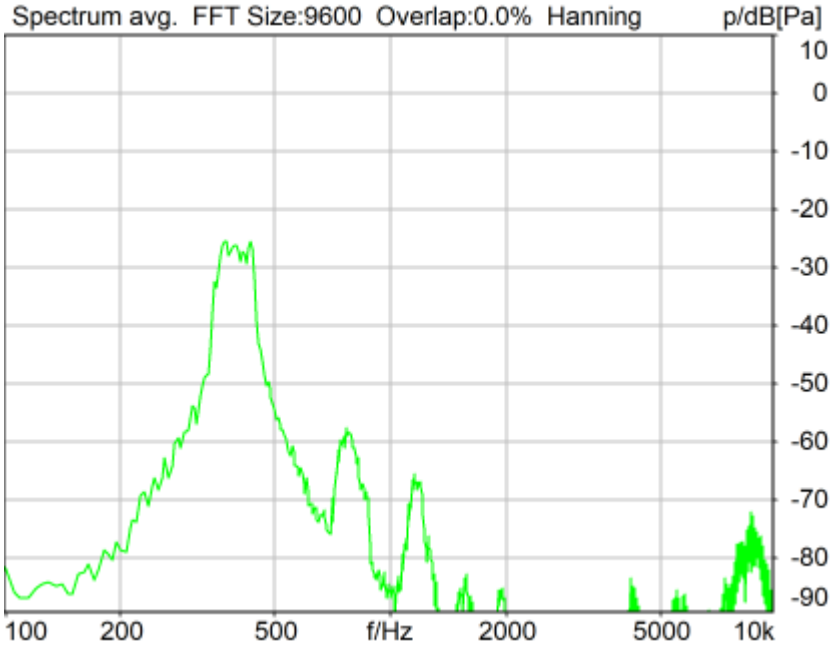
Distortion (Noise) RCV (packed): 28.19 dB (3.89%) Ok

Ok

2024/5/15 16:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



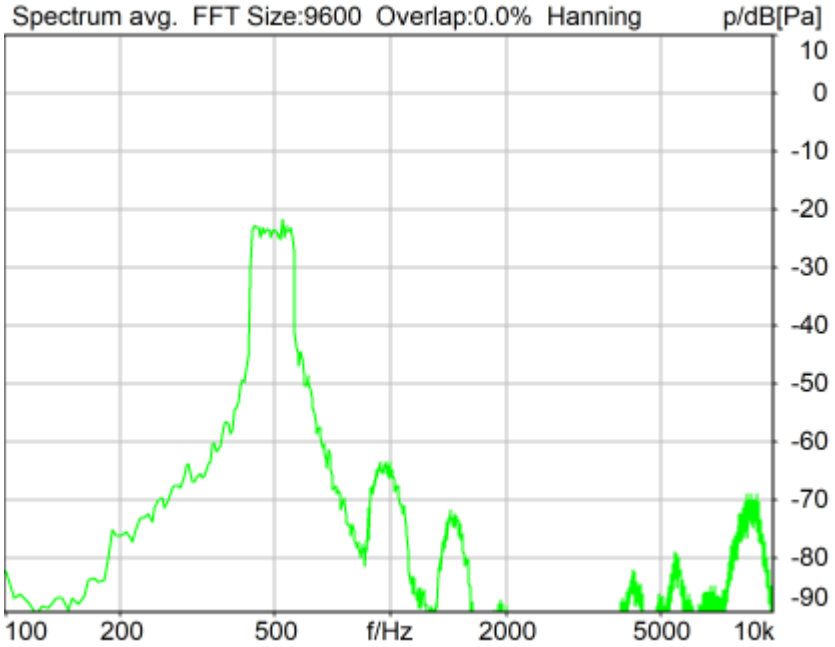
Distortion (Noise) RCV (packed): 28.80 dB (3.63%) Ok

Ok

2024/5/15 16:37 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



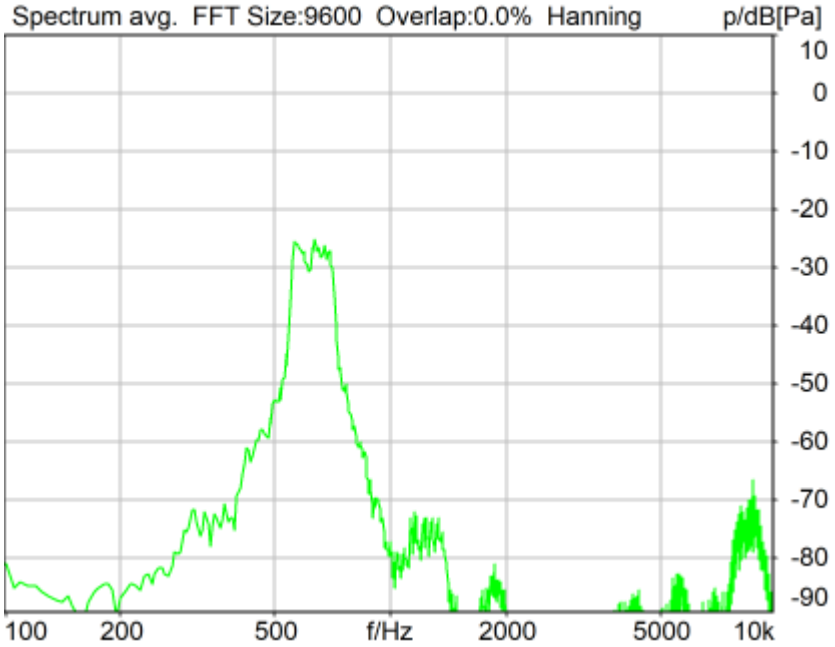
Distortion (Noise) RCV (packed): 31.20 dB (2.75%) Ok

Ok

2024/5/15 16:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



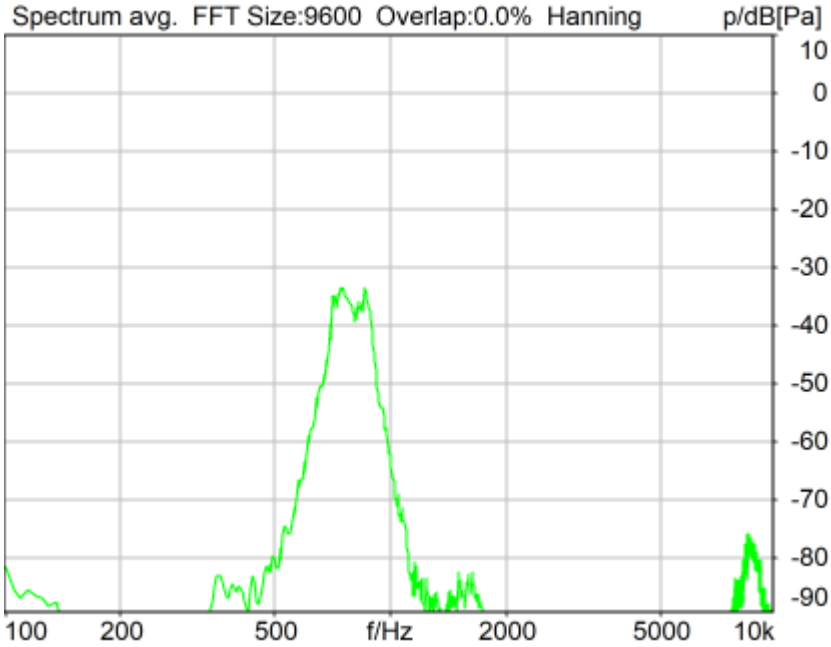
Distortion (Noise) RCV (packed): 28.23 dB (3.88%) Ok

Ok

2024/5/15 16:38 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



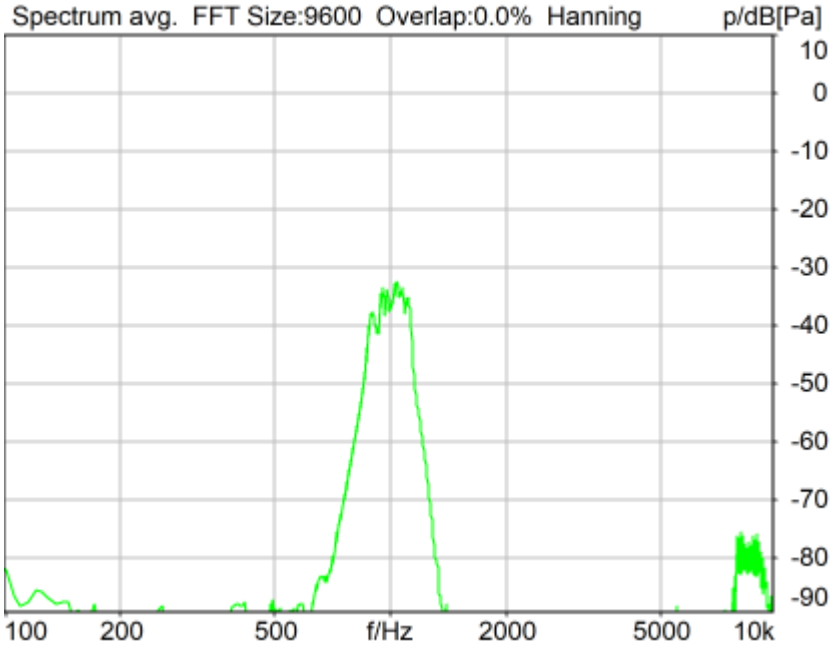
Distortion (Noise) RCV (packed): 21.36 dB (8.55%) Ok

Ok

2024/5/15 16:39 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



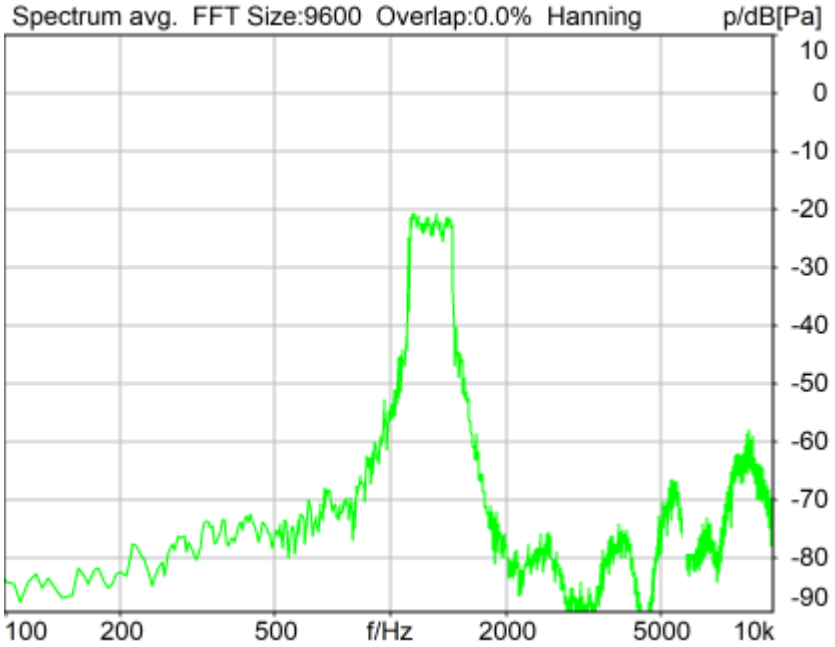
Distortion (Noise) RCV (packed): 22.74 dB (7.29%) Ok

Ok

2024/5/15 16:46 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



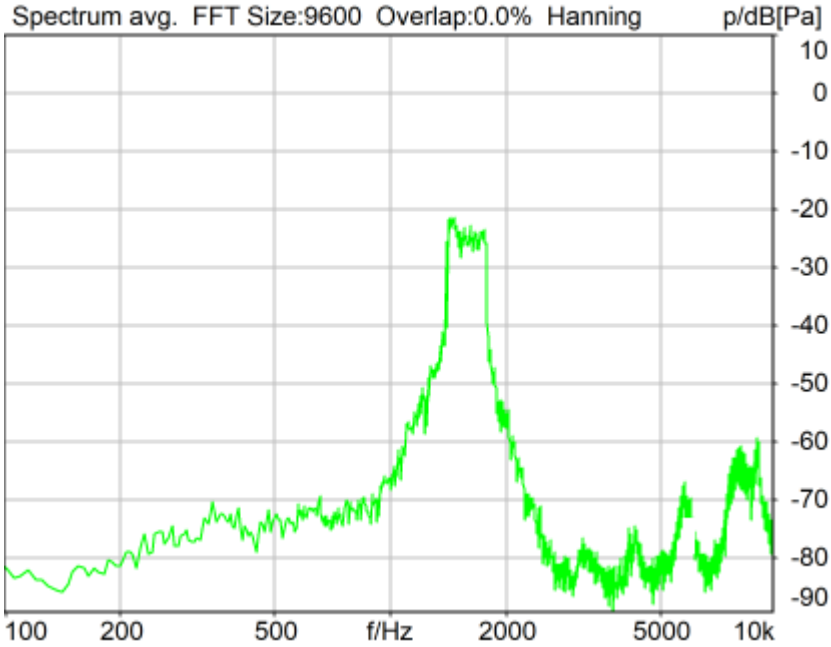
Distortion (Noise) RCV (packed): 23.65 dB (6.57%) Ok

Ok

2024/5/15 16:53 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



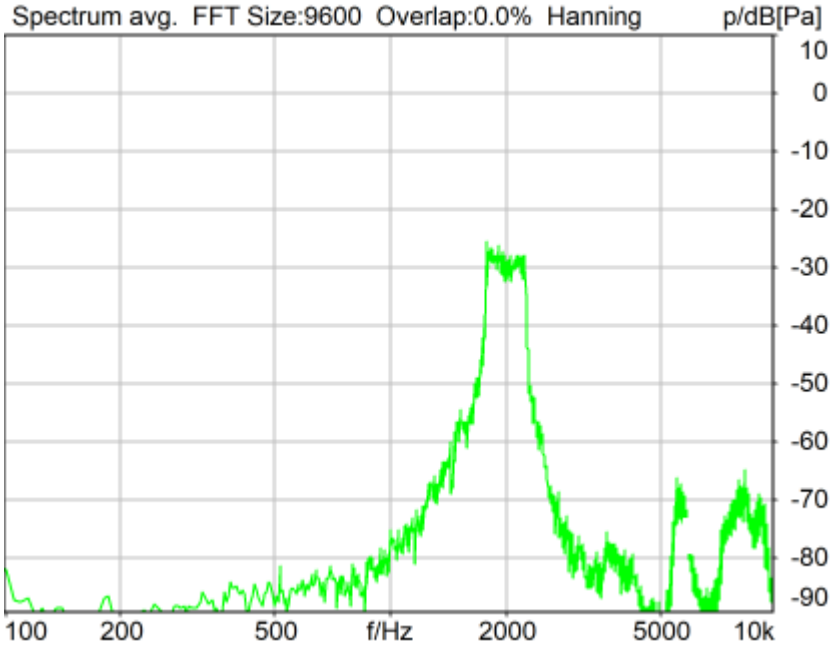
Distortion (Noise) RCV (packed): 23.66 dB (6.56%) Ok

Ok

2024/5/15 16:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



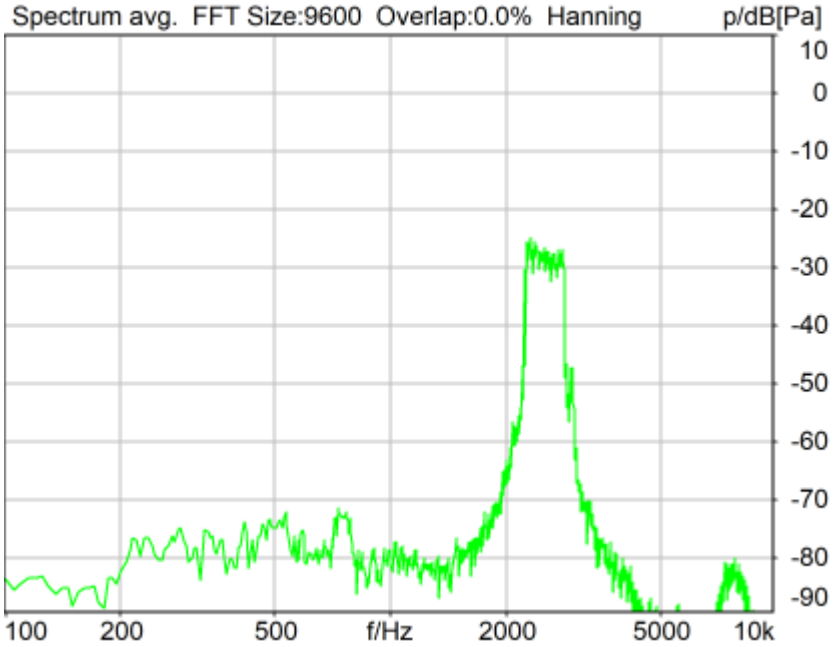
Distortion (Noise) RCV (packed): 21.97 dB (7.97%) Ok

Ok

2024/5/15 16:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



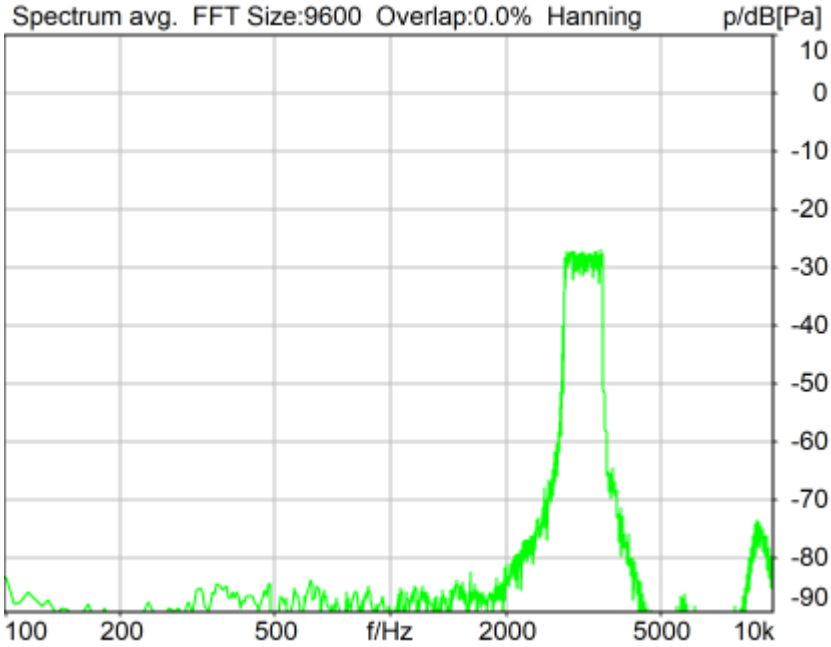
Distortion (Noise) RCV (packed): 26.70 dB (4.62%) Ok

Ok

2024/5/15 16:54 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



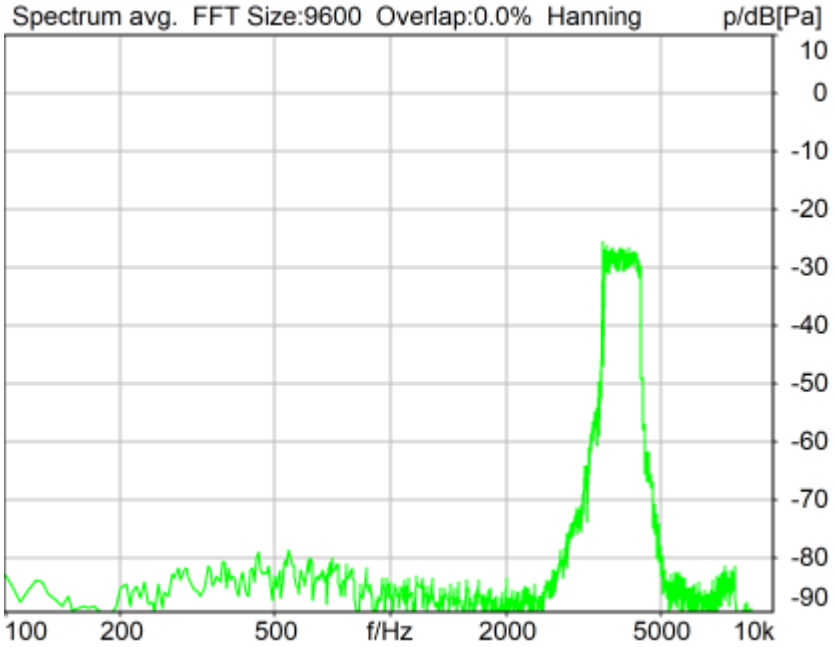
Distortion (Noise) RCV (packed): 32.90 dB (2.27%) Ok

Ok

2024/5/15 16:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



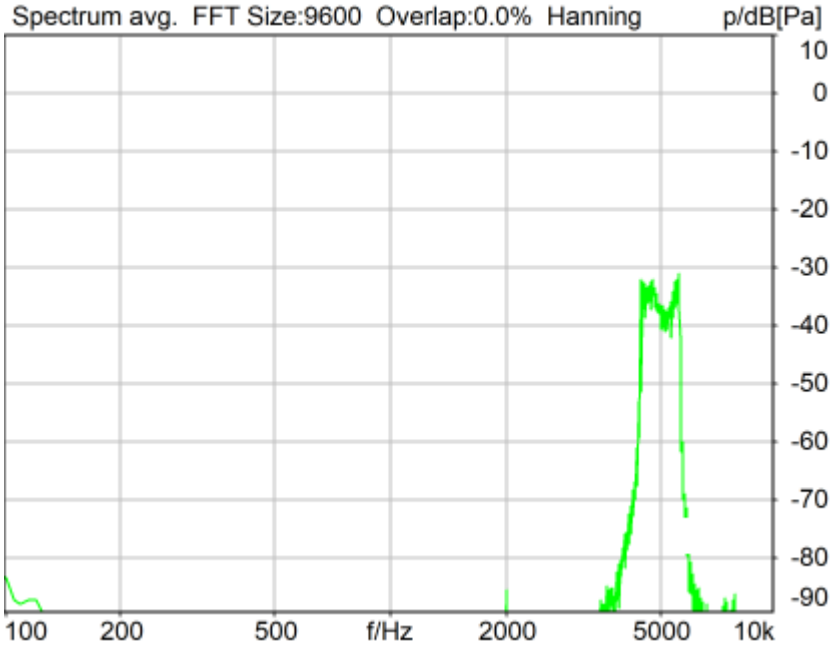
Distortion (Noise) RCV (packed): 29.84 dB (3.22%) Ok

Ok

2024/5/15 16:55 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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



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

Ok

2024/5/15 16:56 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

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

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

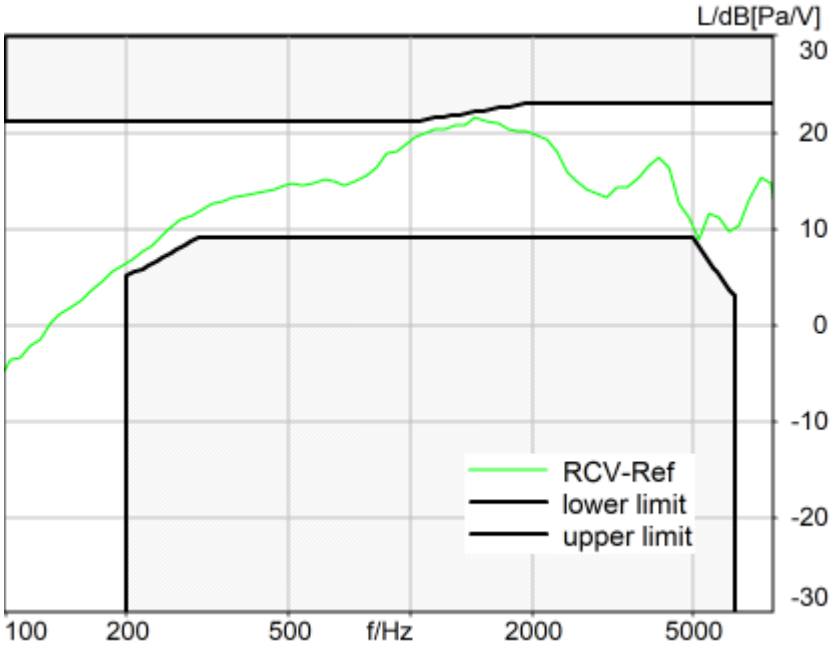
Region	Frequency	SDNR
1	1600Hz	26.13 dB
2	1250Hz	25.77 dB
3	250Hz	27.06 dB
4	315Hz	28.19 dB
5	400Hz	28.80 dB
6	500Hz	31.20 dB
7	630Hz	28.23 dB
8	800Hz	21.36 dB
9	1000Hz	25.68 dB
10	2000Hz	21.97 dB
11	2500Hz	26.70 dB
12	3150Hz	32.90 dB
13	4000Hz	29.84 dB
14	5000Hz	32.02 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 21.36dB at 800Hz.

2024/5/15 16:56 ACQUA

5.3 Frequency Response 8N FF, Index: 1

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



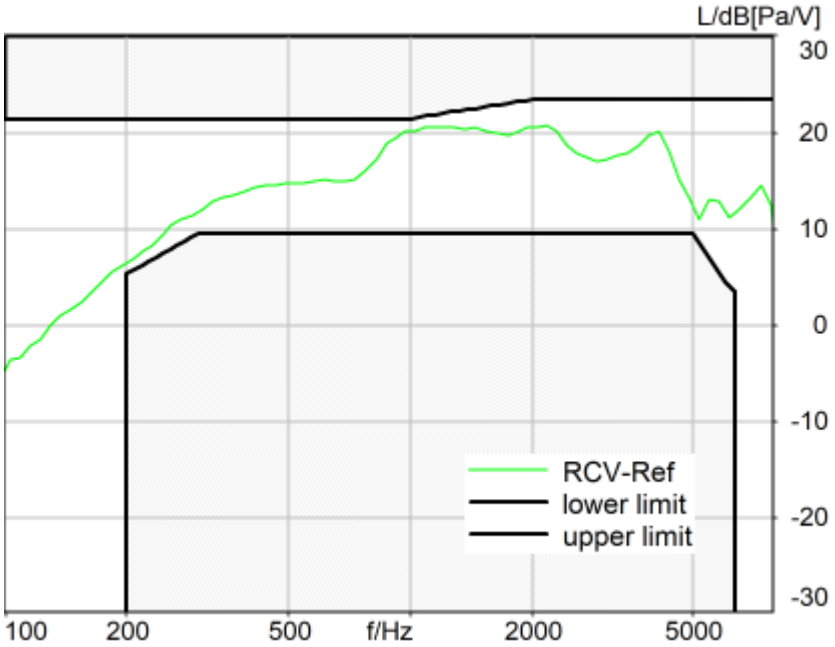
Absolute minimal distance
0.54 dB at 1447.5 Hz Ok

Ok

2024/5/16 13:24 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 8N DF, Index: 1

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



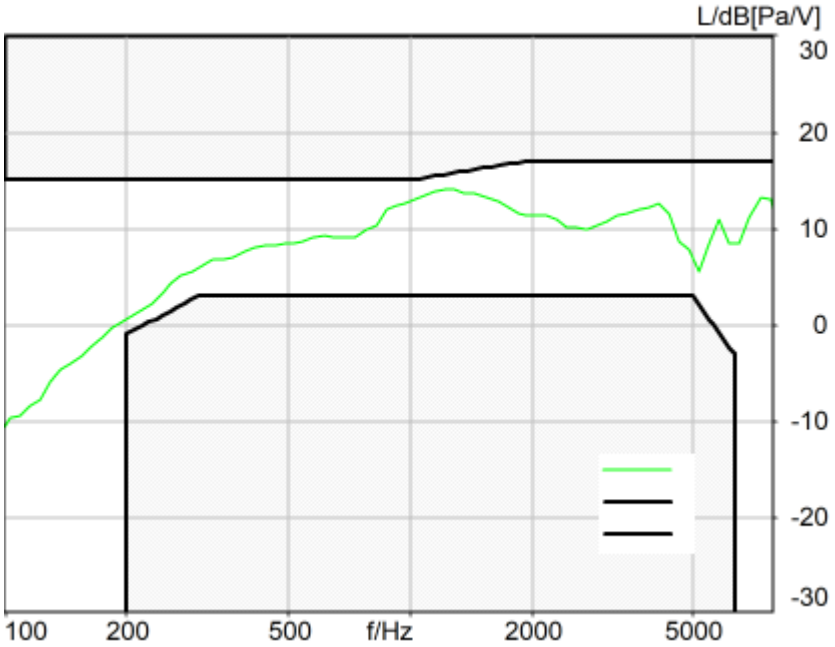
Absolute minimal distance
1.17 dB at 1088.7 Hz Ok

Ok

2024/5/16 13:25 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor

5.3 Frequency Response 2N FF, Index: 1

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



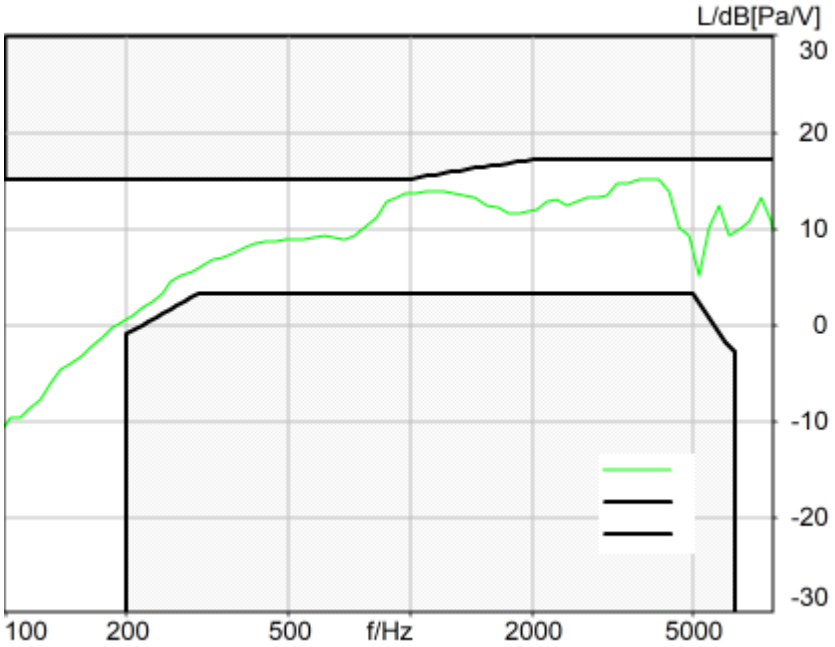
Absolute minimal distance
1.67 dB at 1216.1 Hz Ok

Ok

2024/5/15 16:35 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
1.53 dB at 1088.7 Hz Ok

Ok

2024/5/15 16:35 ACQUA 6.0.200
Unmodified HEAD acoustics Measurement Descriptor