

Appendix A. Volume Control Evaluation Results

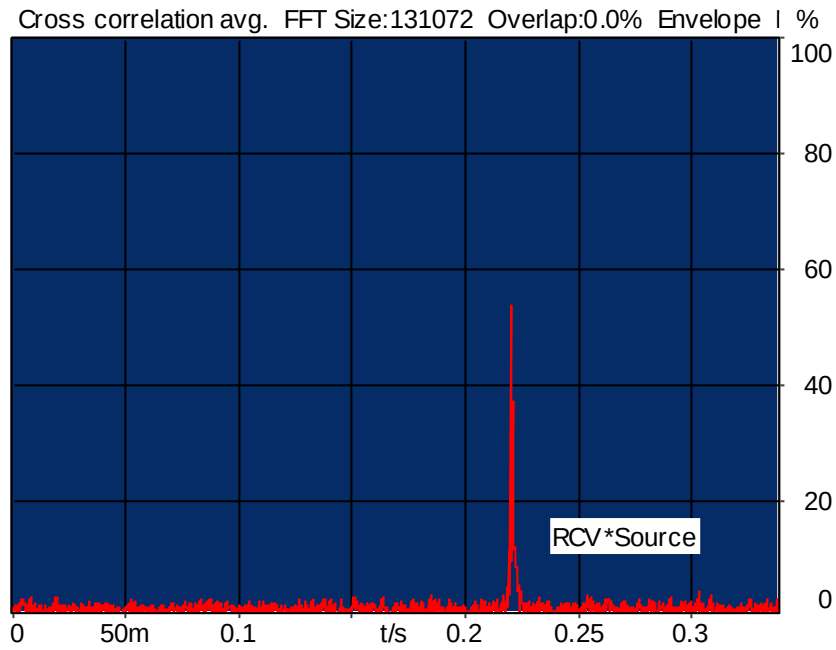
<Evaluation results for KDB 285076 D05 2.a>

#1 WiFi 6GHz EVS WB 128Kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	220.5
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.63
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	83.62
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.54
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.74
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.14
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.62
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.53
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.68
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.39
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.30
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.68
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.11
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.29
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.17
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.98
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.79
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	24.30
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.24
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.13
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.21
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.47
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.28
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.95
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.14
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.07
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.99
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.83
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.67
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.83
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.71
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.24
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	22.07
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 1151.2 Hz	0.73
5.3 Frequency Response 8N DF	Ok	Min. dist. to tolerance scheme [dB], 205.7 Hz	0.57
5.3 Frequency Response 2N FF	Ok	Min. dist. to tolerance scheme [dB], 205.7 Hz	0.64
5.3 Frequency Response 2N DF	Ok	Min. dist. to tolerance scheme [dB], 1088.7 Hz	0.49

Overall Receive Delay WB

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

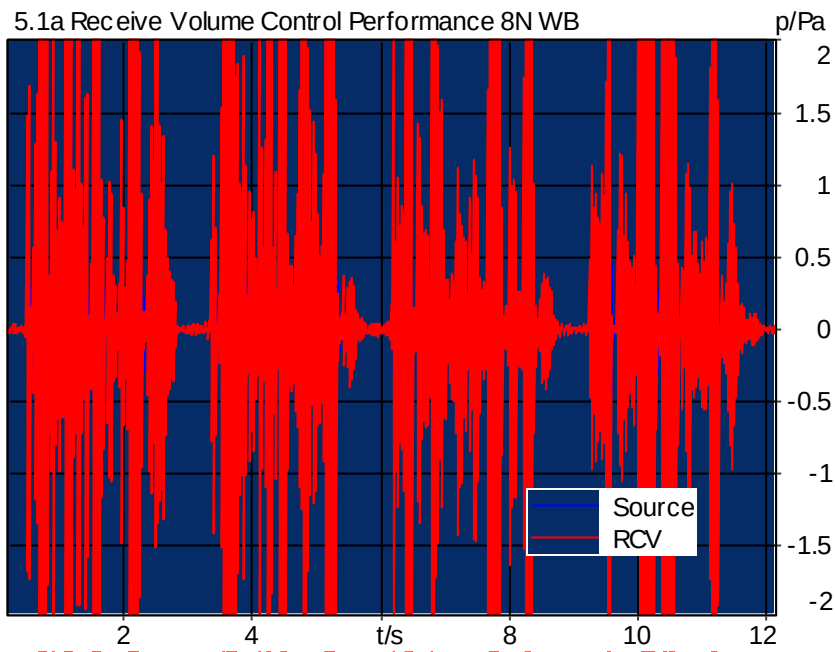


Channel	Delay	Correlation
RCV*Source	220.5 ms	53.64 %

2025-08-18 下午 03:31 ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	88.63 dB[SPL]	80.59%	Ok

Ok

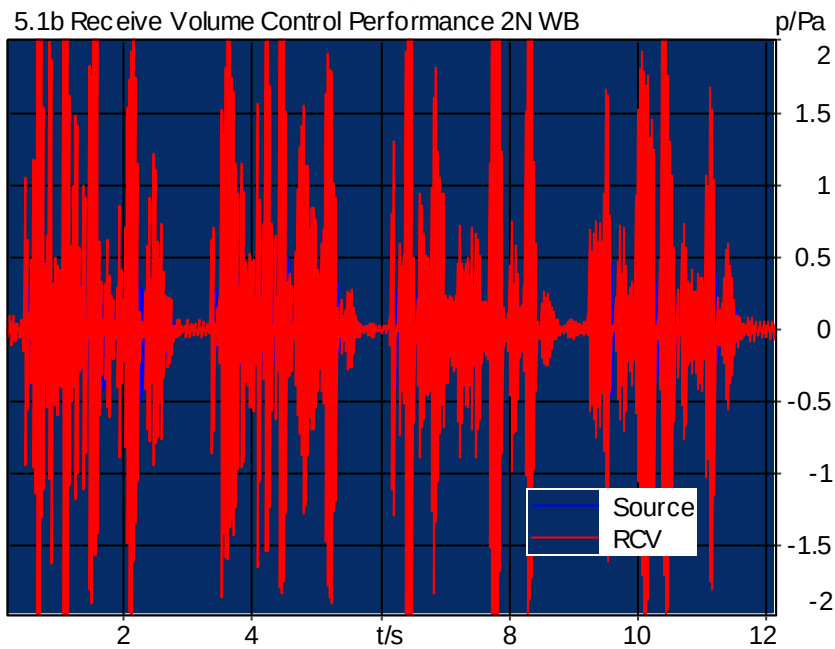
2025-08-18 下午 03:34 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	83.62 dB[SPL]	83.93%	Ok

Ok

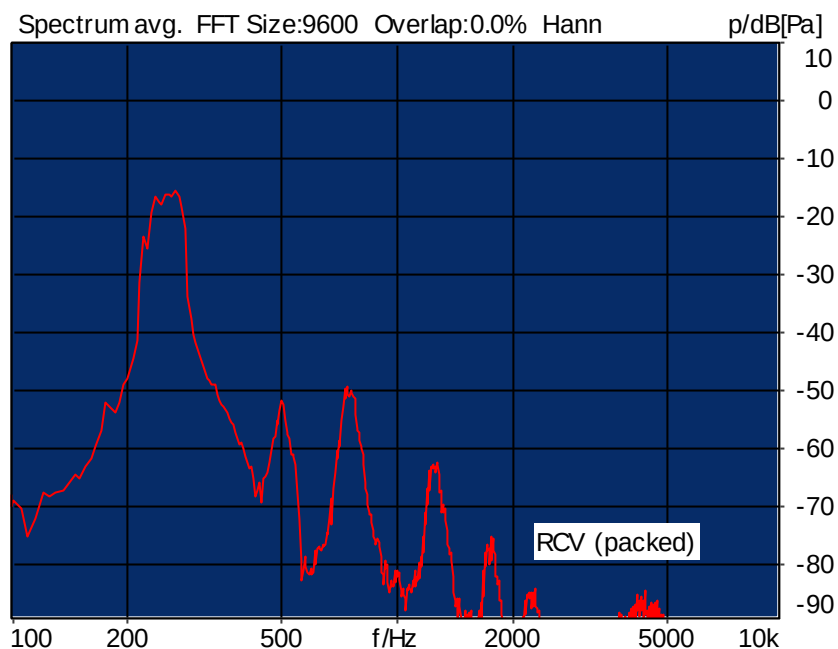
2025-08-18 下午 03:44 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.2 RCV Distortion and Noise - 250 Hz 8N WB

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



Distortion (Noise) RCV (packed): 31.54 dB (2.65%) Ok

Ok

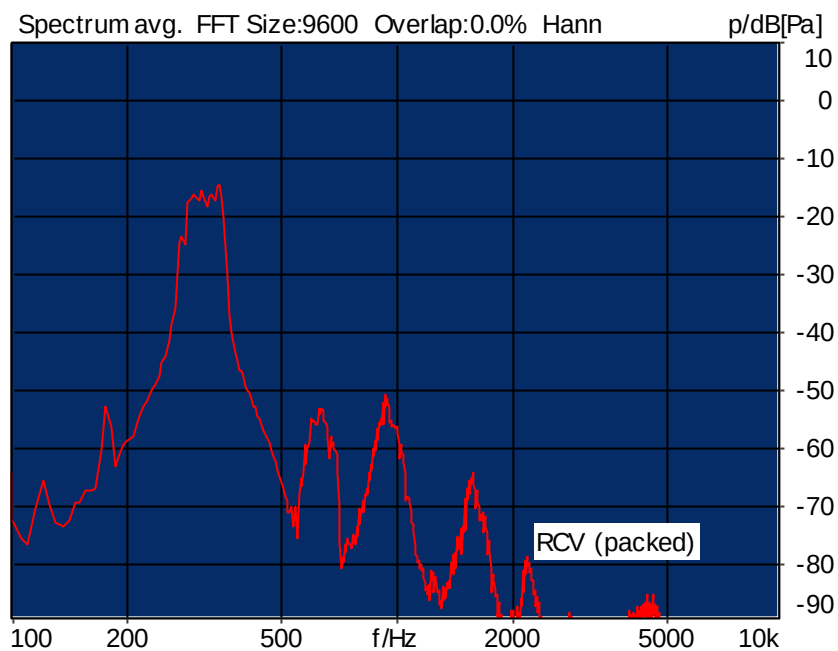
2025-08-18 下午 03:35 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 315 Hz 8N WB

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



Distortion (Noise) RCV (packed): 32.74 dB (2.31%) Ok

Ok

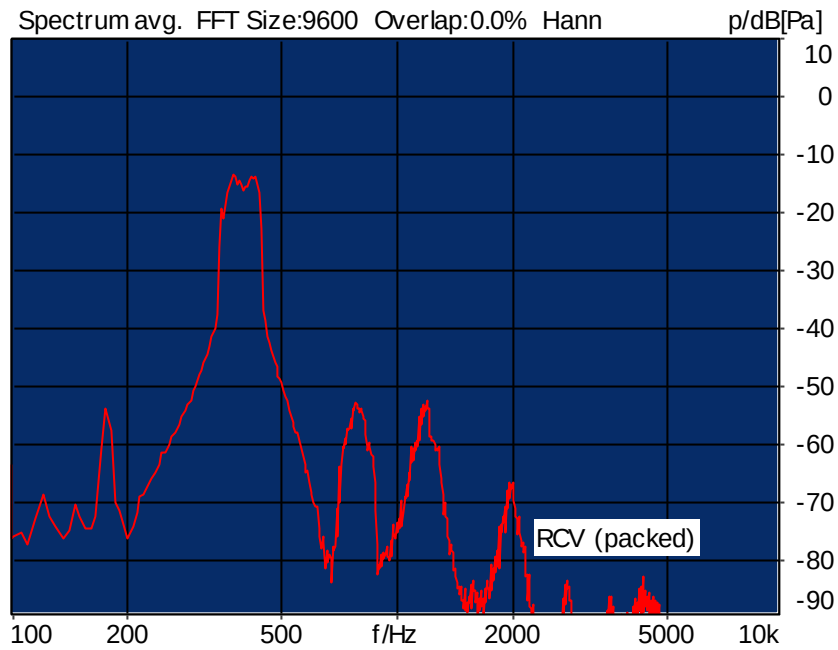
2025-08-18 下午 03:35 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 400 Hz 8N WB

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



Distortion (Noise) RCV (packed): 34.14 dB (1.96%) Ok

Ok

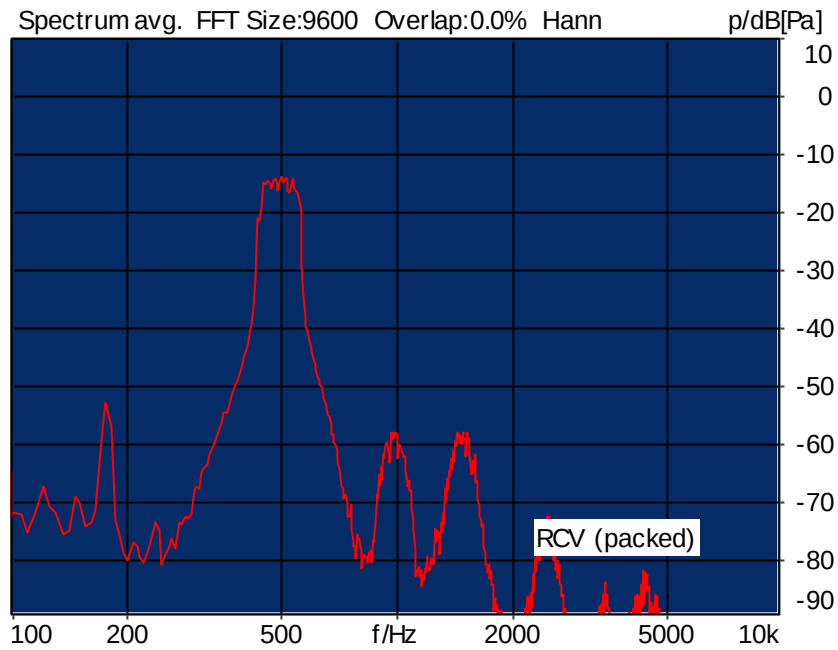
2025-08-18 下午 03:36 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 500 Hz 8N WB

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



Distortion (Noise) RCV (packed): 34.62 dB (1.86%) Ok

Ok

2025-08-18 下午 03:37 ACQUA 6.1.110

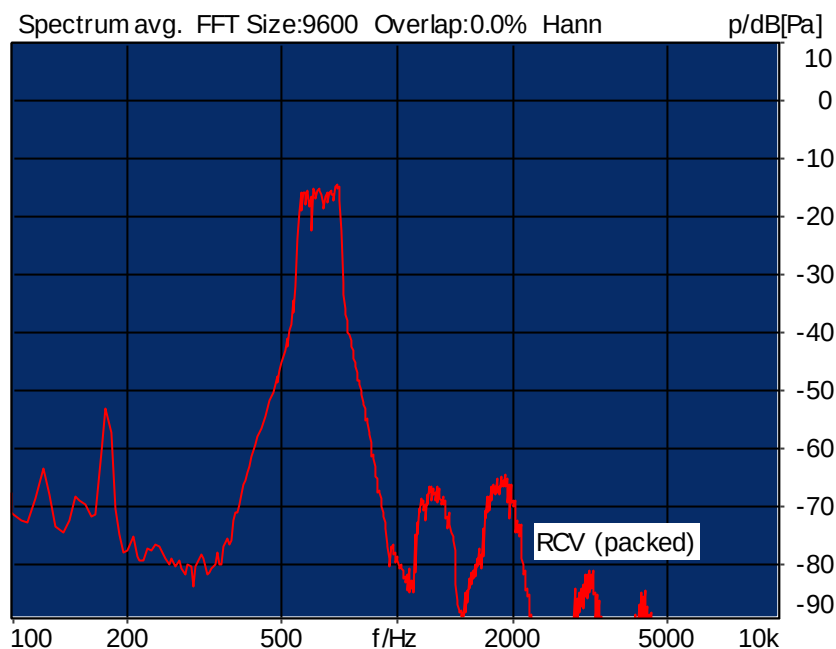
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 630 Hz 8N WB

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



Distortion (Noise) RCV (packed): 31.53 dB (2.65%) Ok

Ok

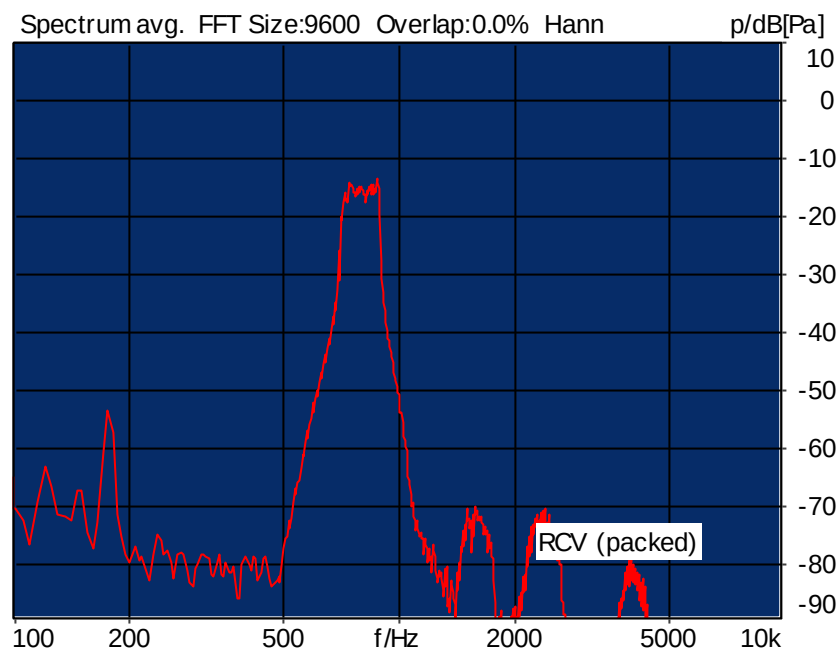
2025-08-18 下午 03:37 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 800 Hz 8N WB

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



Distortion (Noise) RCV (packed): 30.68 dB (2.92%) Ok

Ok

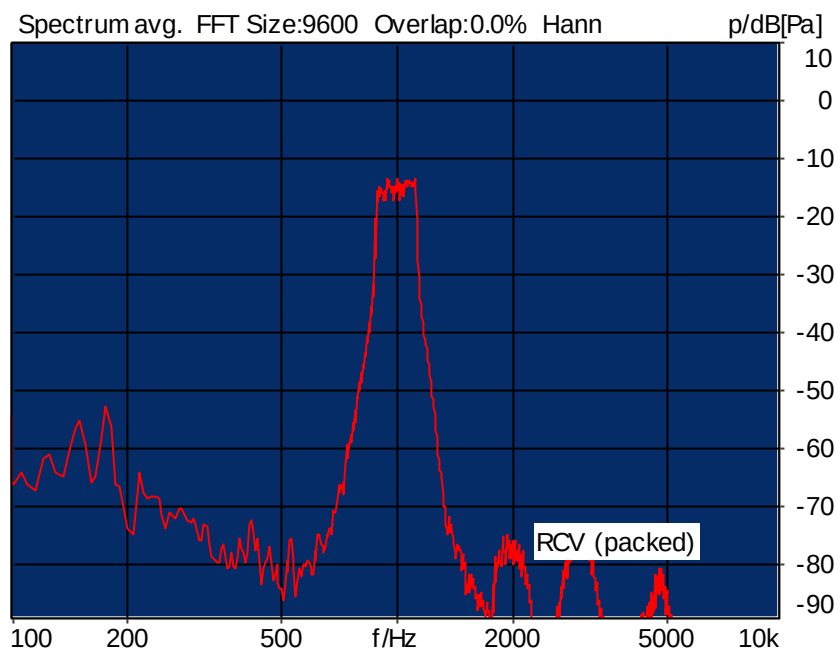
2025-08-18 下午 03:38 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1000 Hz 8N WB

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



Distortion (Noise) RCV (packed): 30.39 dB (3.02%) Ok

Ok

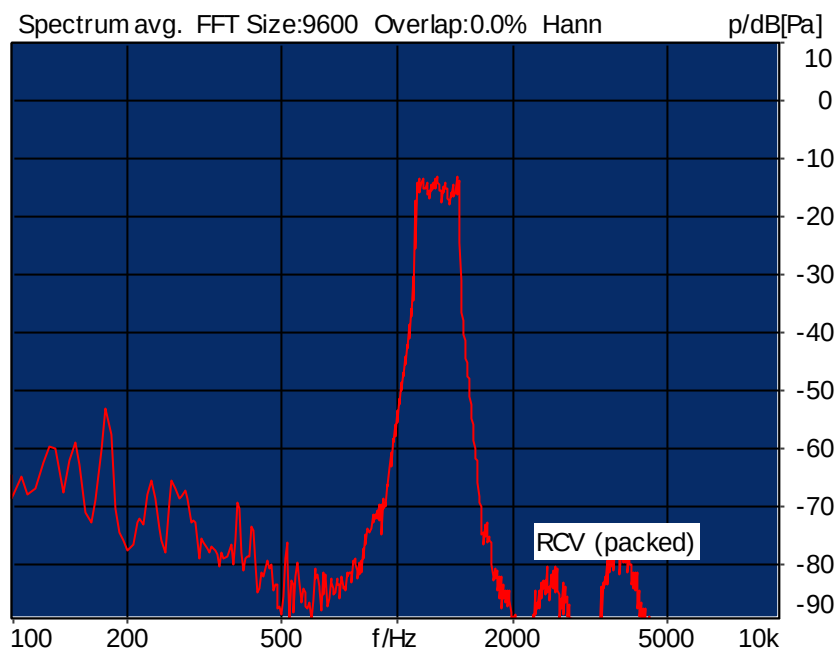
2025-08-18 下午 03:38 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1250 Hz 8N WB

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



Distortion (Noise) RCV (packed): 24.30 dB (6.09%) Ok

Ok

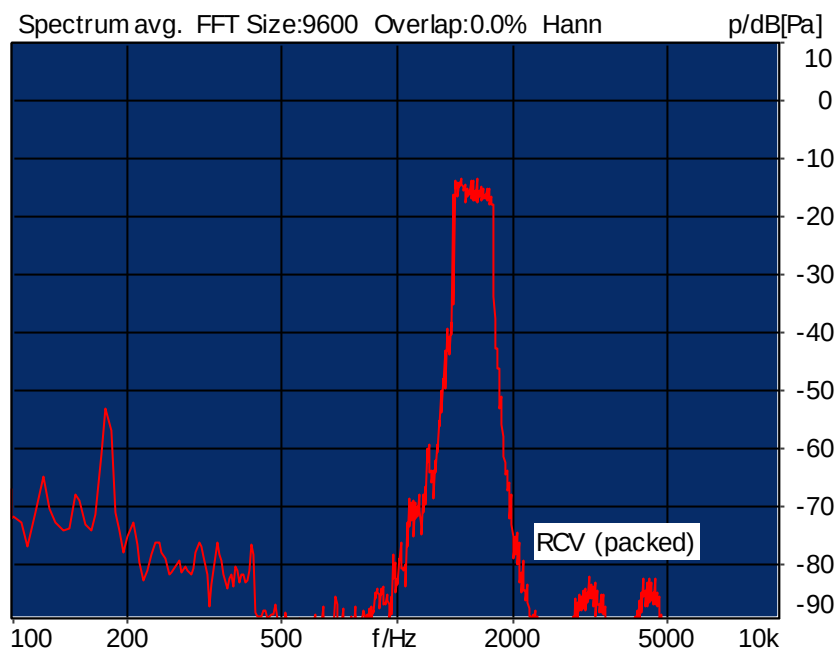
2025-08-18 下午 03:39 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1600 Hz 8N WB

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



Distortion (Noise) RCV (packed): 33.68 dB (2.07%) Ok

Ok

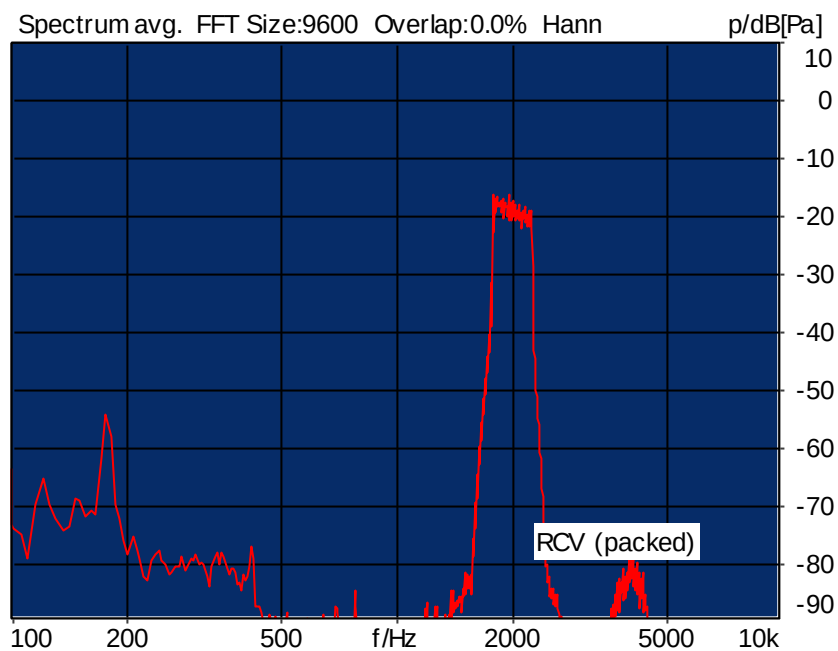
2025-08-18 下午 03:39 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 2000 Hz 8N WB

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



Distortion (Noise) RCV (packed): 33.11 dB (2.21%) Ok

Ok

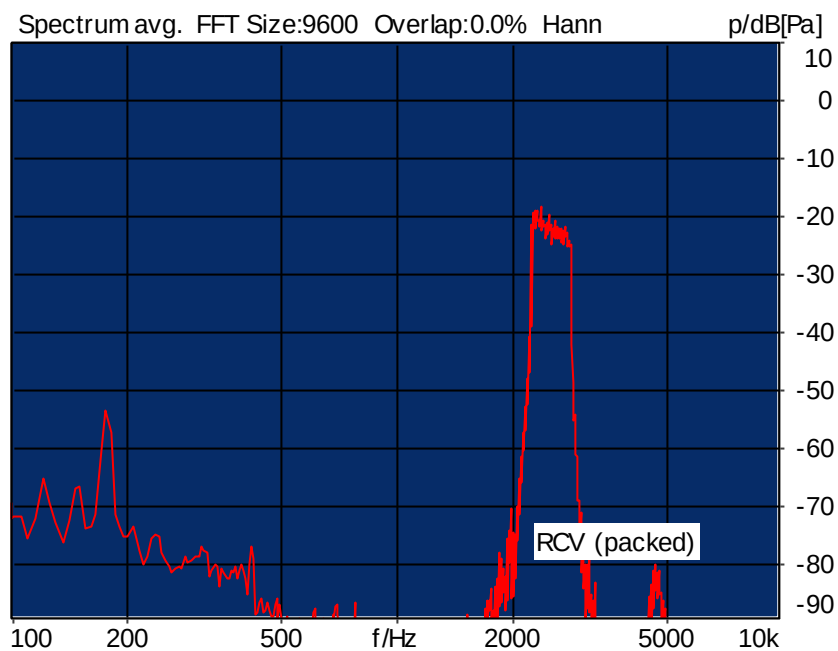
2025-08-18 下午 03:40 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 2500 Hz 8N WB

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



Distortion (Noise) RCV (packed): 35.29 dB (1.72%) Ok

Ok

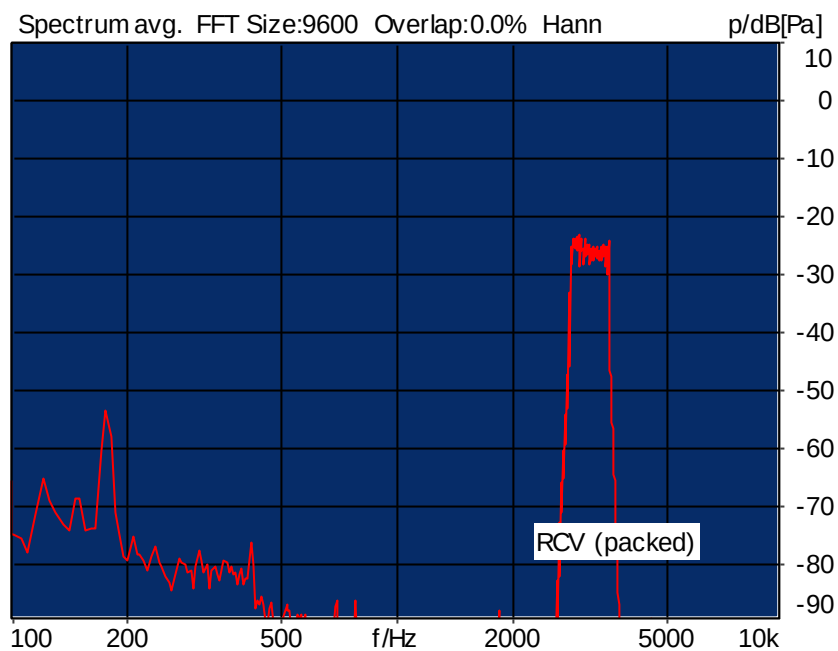
2025-08-18 下午 03:40 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 3150 Hz 8N WB

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



Distortion (Noise) RCV (packed): 34.17 dB (1.96%) Ok

Ok

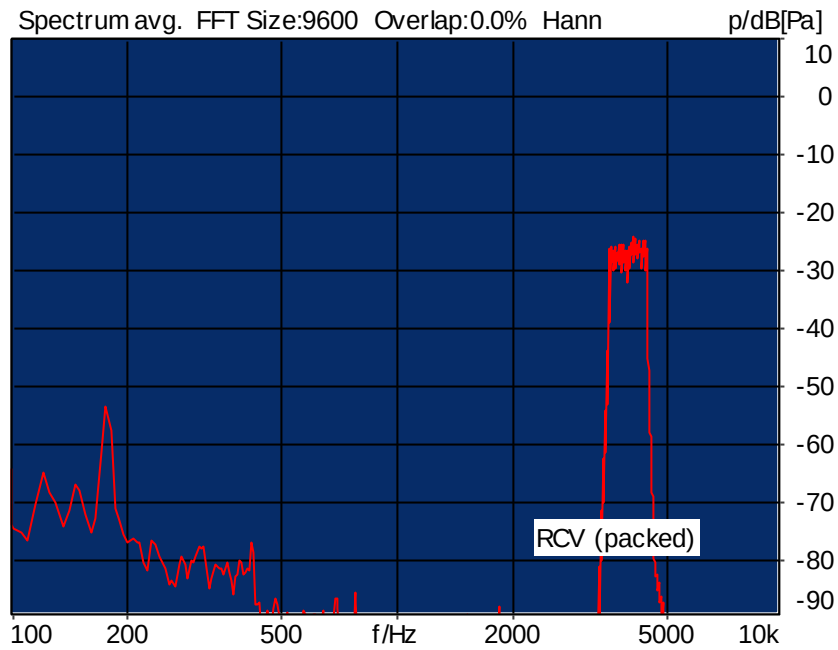
2025-08-18 下午 03:41 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 4000 Hz 8N WB

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



Distortion (Noise) RCV (packed): 35.98 dB (1.59%) Ok

Ok

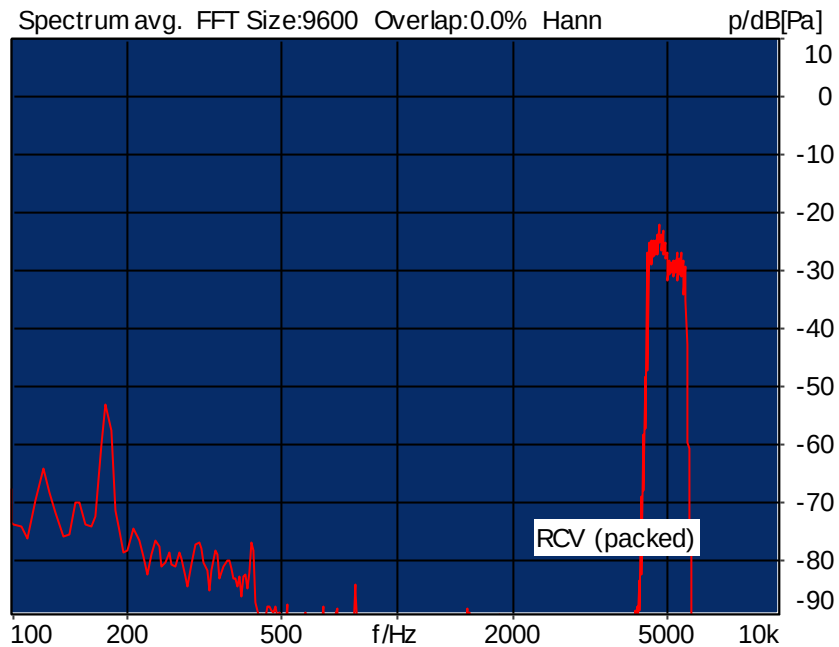
2025-08-18 下午 03:41 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 5000 Hz 8N WB

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



Distortion (Noise) RCV (packed): 37.79 dB (1.29%) Ok

Ok

2025-08-18 下午 03:42 ACQUA 6.1.110

Limits

lower
20.00 dB



Report - Receive Distortion and Noise (Conversational Gain) 8N WB

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

Region	Frequency	SDNR
1	250Hz	31.54 dB
2	315Hz	32.74 dB
3	400Hz	34.14 dB
4	500Hz	34.62 dB
5	630Hz	31.53 dB
6	800Hz	30.68 dB
7	1000Hz	30.39 dB
8	1250Hz	24.30 dB
9	1600Hz	33.68 dB
10	2000Hz	33.11 dB
11	2500Hz	35.29 dB
12	3150Hz	34.17 dB
13	4000Hz	35.98 dB
14	5000Hz	37.79 dB

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

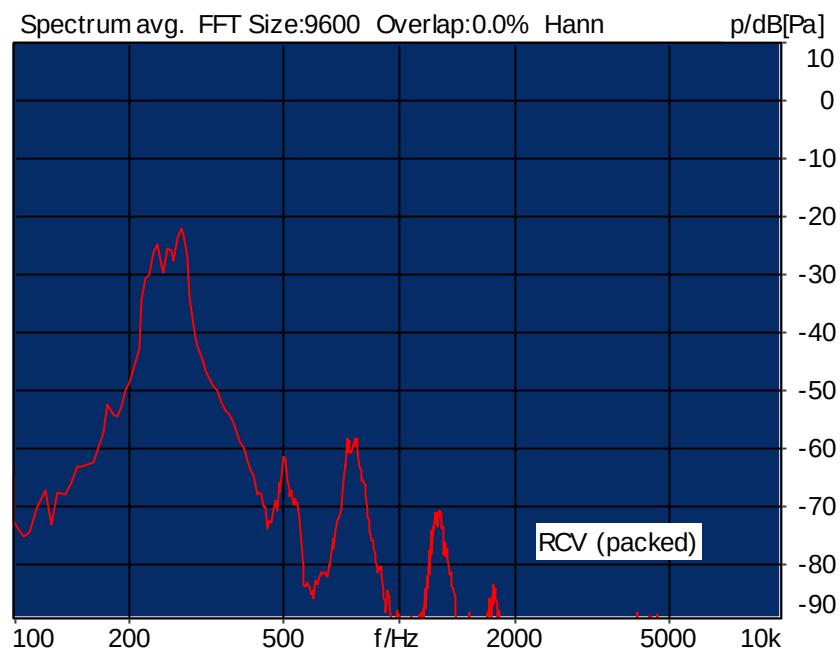
Smallest SDNR was 24.30dB at 1250Hz.

2025-08-18 下午 03:42 ACQUA



5.2 RCV Distortion and Noise - 250 Hz 2N WB

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



Distortion (Noise) RCV (packed): 29.24 dB (3.45%) Ok

Ok

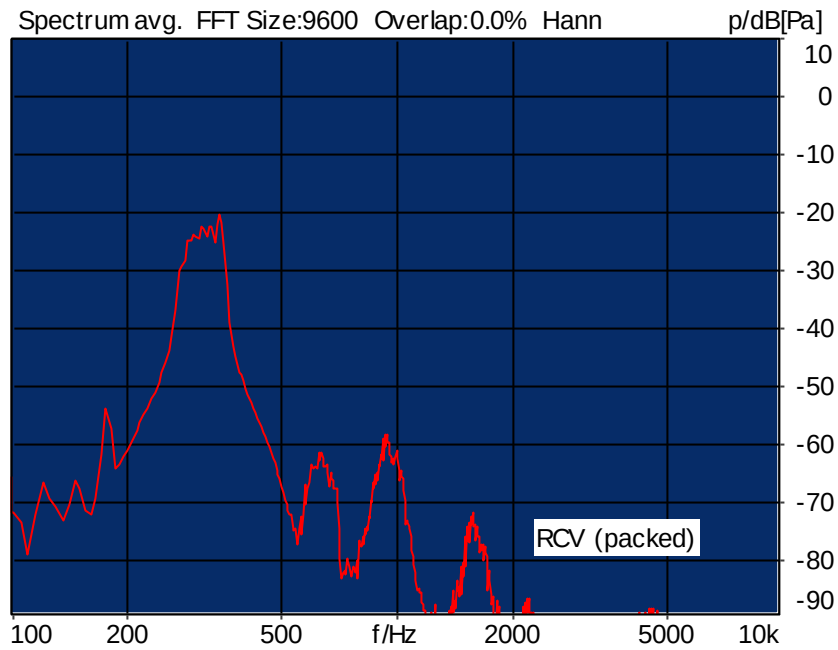
2025-08-18 下午 03:44 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 315 Hz 2N WB

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



Distortion (Noise) RCV (packed): 31.13 dB (2.78%) Ok

Ok

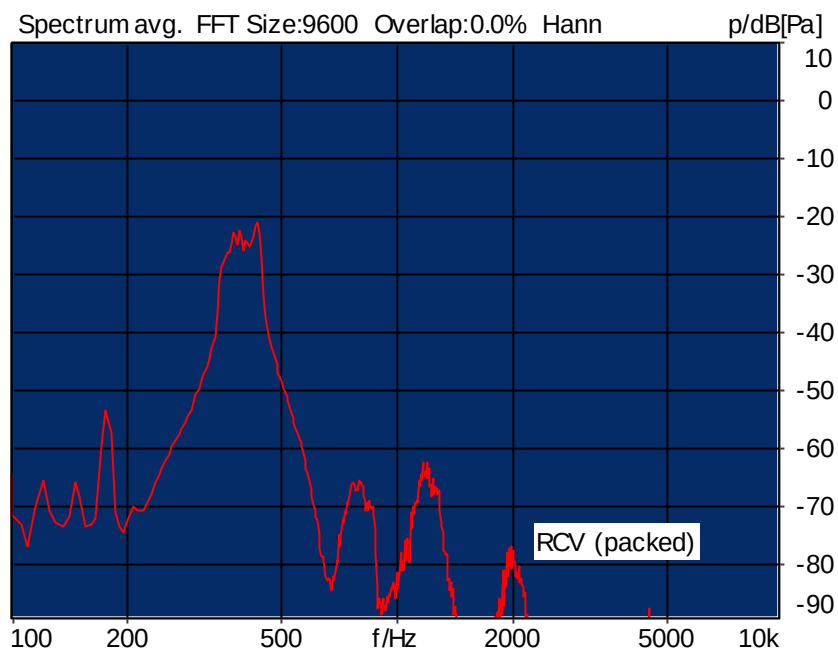
2025-08-18 下午 03:45 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 400 Hz 2N WB

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



Distortion (Noise) RCV (packed): 29.21 dB (3.46%) Ok

Ok

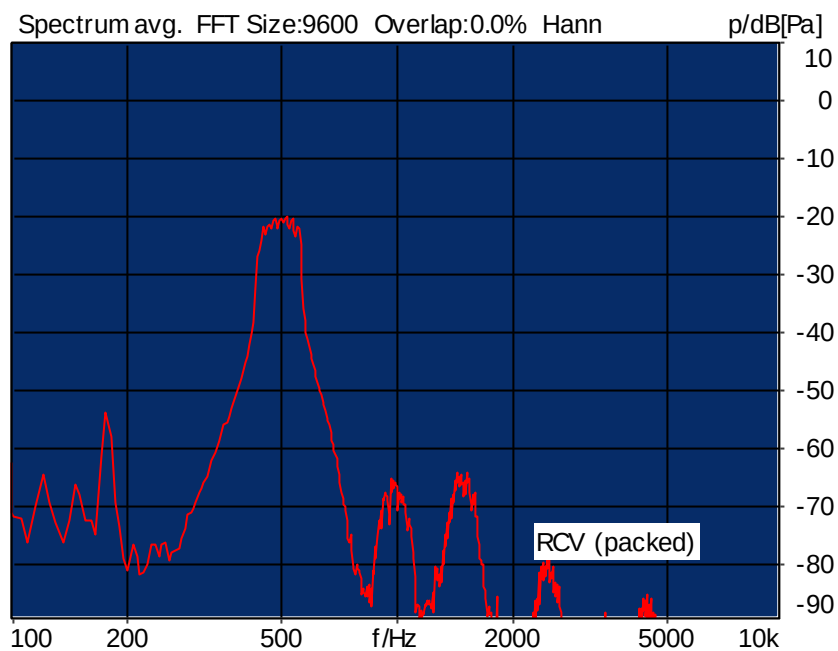
2025-08-18 下午 03:45 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 500 Hz 2N WB

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



Distortion (Noise) RCV (packed): 30.47 dB (3.00%) Ok

Ok

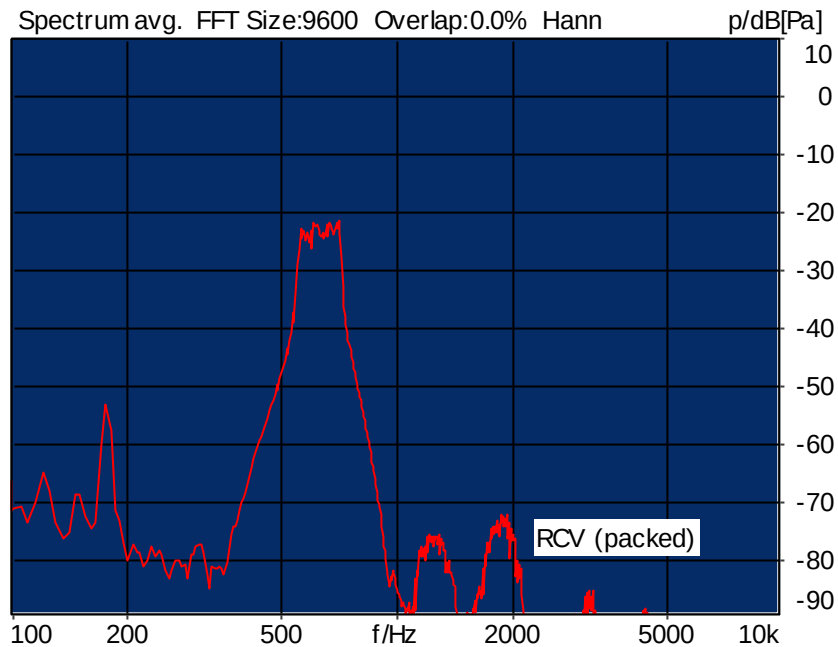
2025-08-18 下午 03:46 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 630 Hz 2N WB

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



Distortion (Noise) RCV (packed): 27.28 dB (4.32%) Ok

Ok

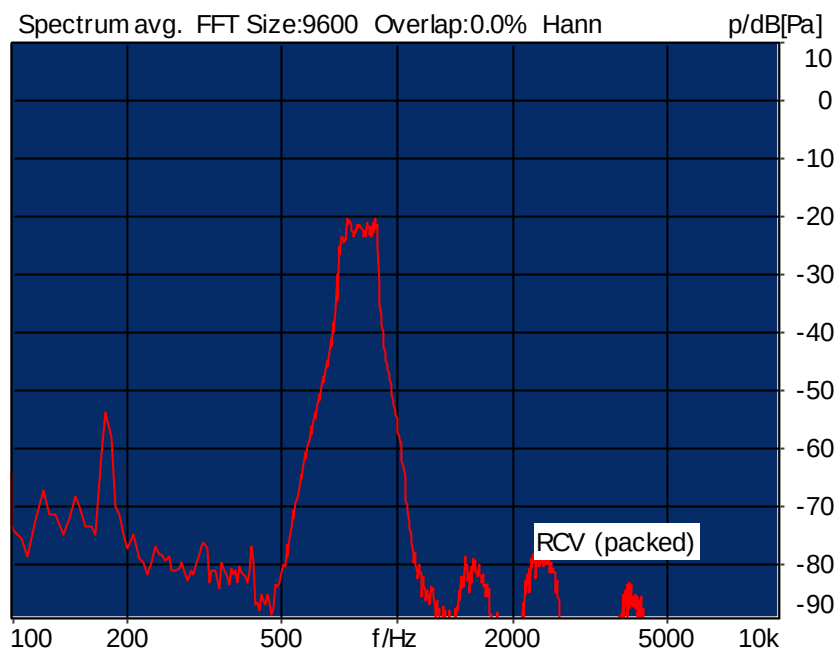
2025-08-18 下午 03:47 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 800 Hz 2N WB

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



Distortion (Noise) RCV (packed): 27.95 dB (4.00%) Ok

Ok

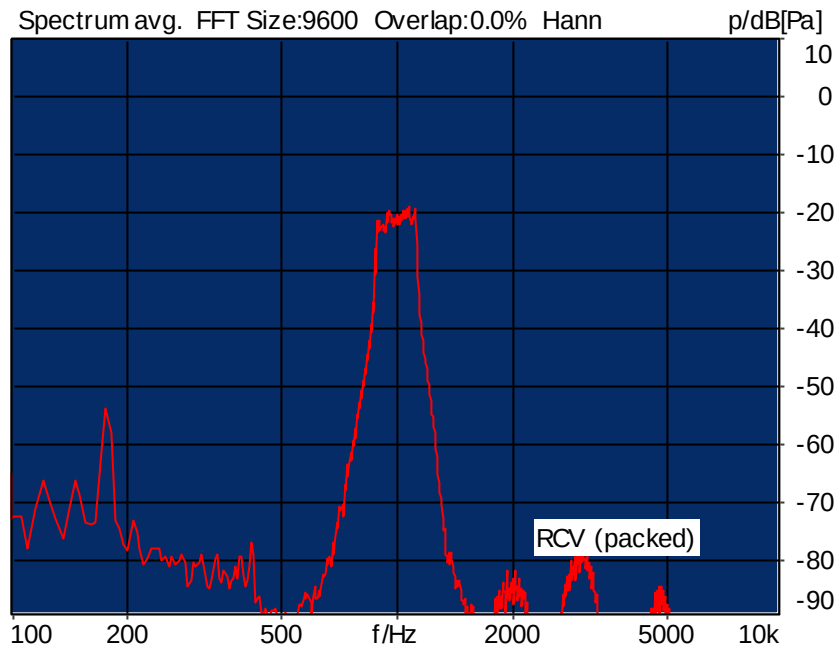
2025-08-18 下午 03:47 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1000 Hz 2N WB

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



Distortion (Noise) RCV (packed): 28.14 dB (3.92%) Ok

Ok

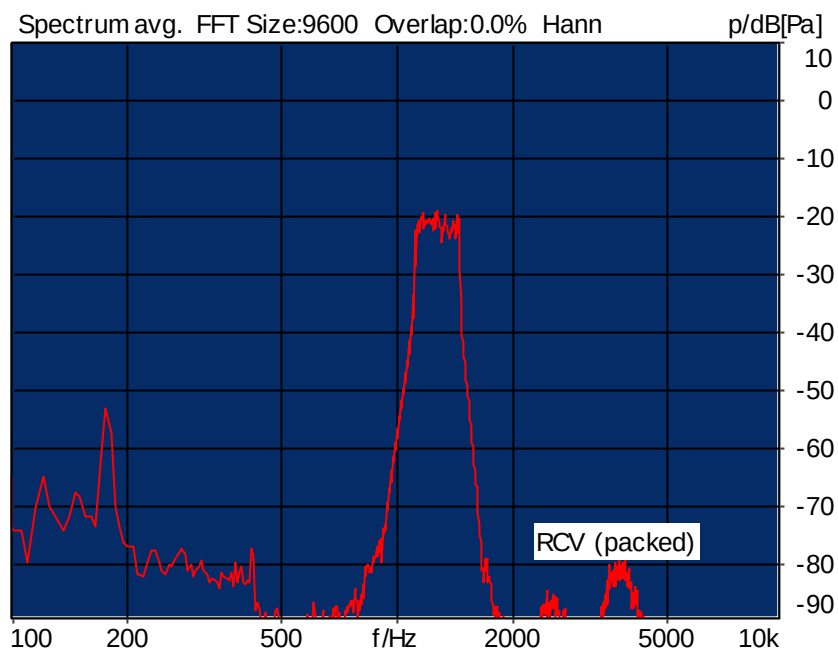
2025-08-18 下午 03:48 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1250 Hz 2N WB

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



Distortion (Noise) RCV (packed): 22.07 dB (7.88%) Ok

Ok

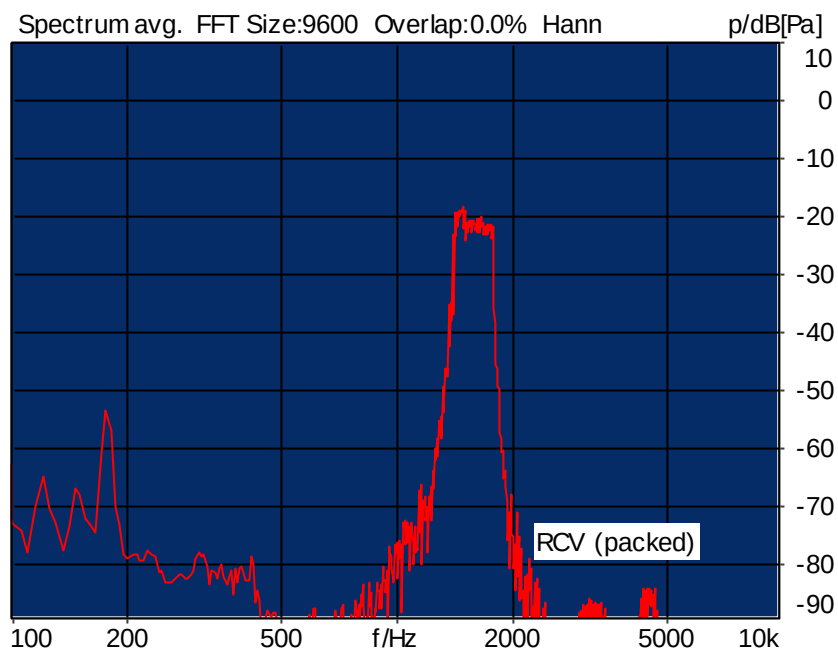
2025-08-18 下午 03:48 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 1600 Hz 2N WB

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



Distortion (Noise) RCV (packed): 29.99 dB (3.17%) Ok

Ok

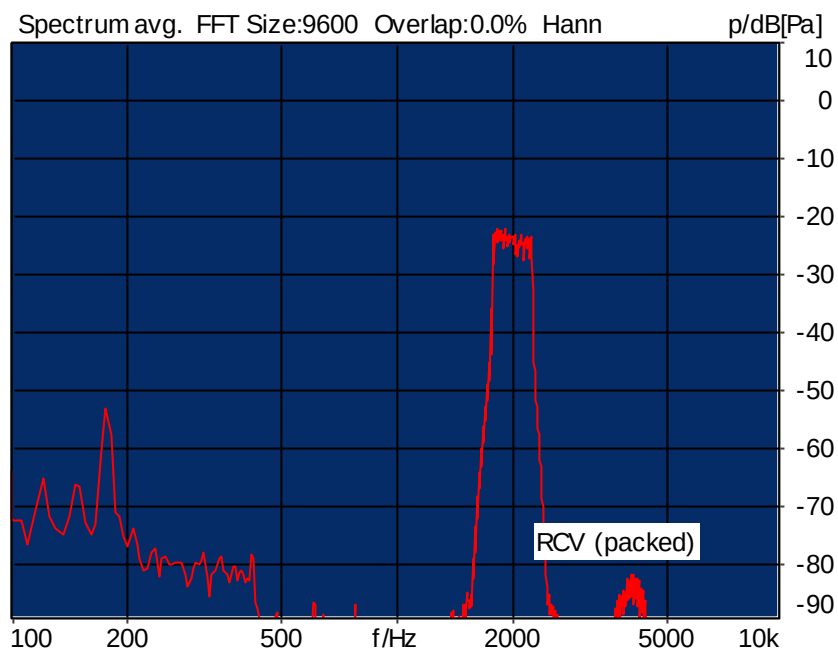
2025-08-18 下午 03:49 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 2000 Hz 2N WB

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



Distortion (Noise) RCV (packed): 31.83 dB (2.56%) Ok

Ok

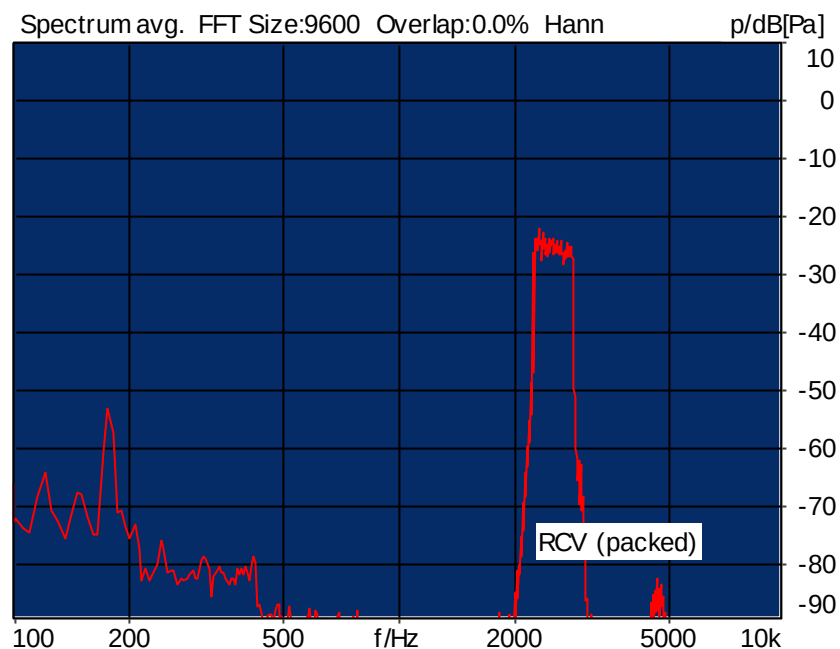
2025-08-18 下午 03:49 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 2500 Hz 2N WB

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



Distortion (Noise) RCV (packed): 37.67 dB (1.31%) Ok

Ok

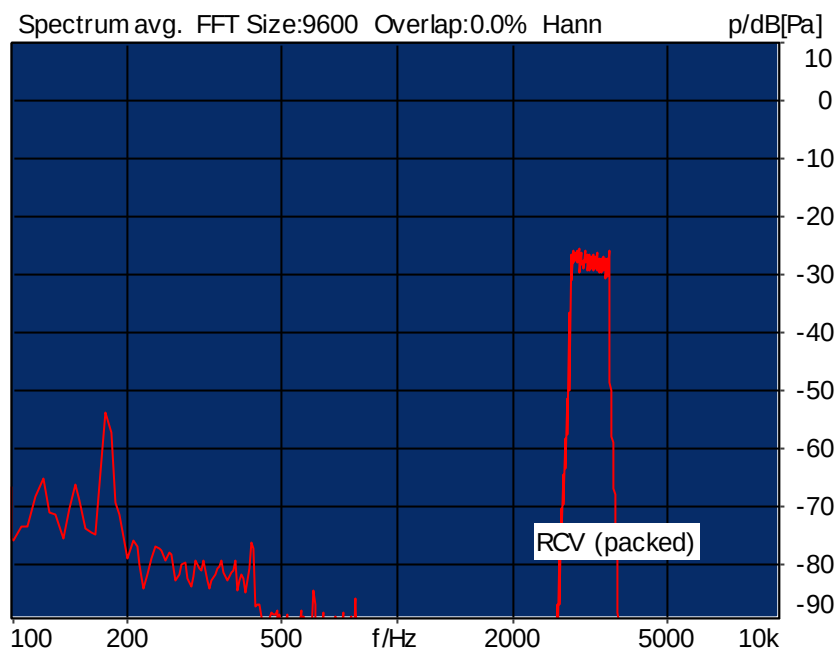
2025-08-18 下午 03:50 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 3150 Hz 2N WB

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



Distortion (Noise) RCV (packed): 35.83 dB (1.62%) Ok

Ok

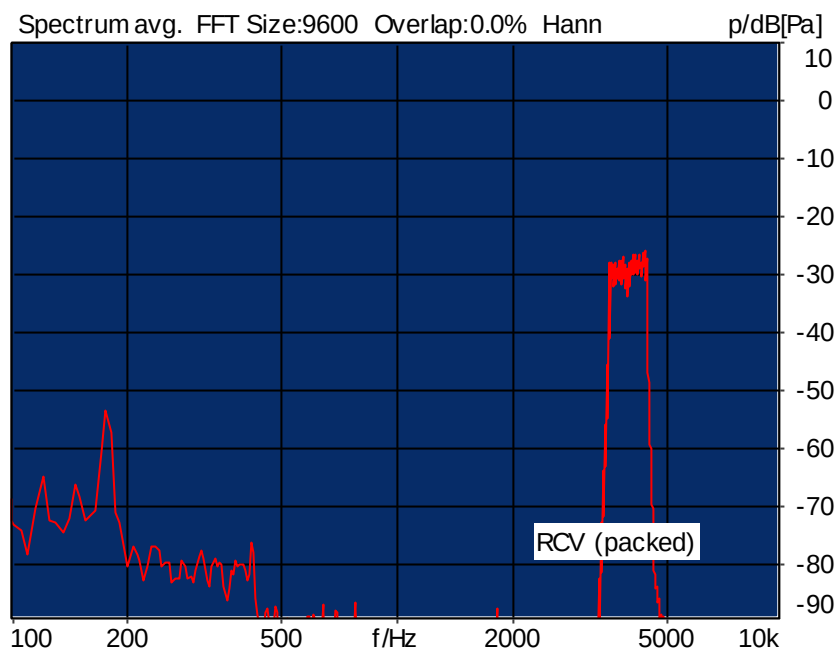
2025-08-18 下午 03:50 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 4000 Hz 2N WB

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



Distortion (Noise) RCV (packed): 35.71 dB (1.64%) Ok

Ok

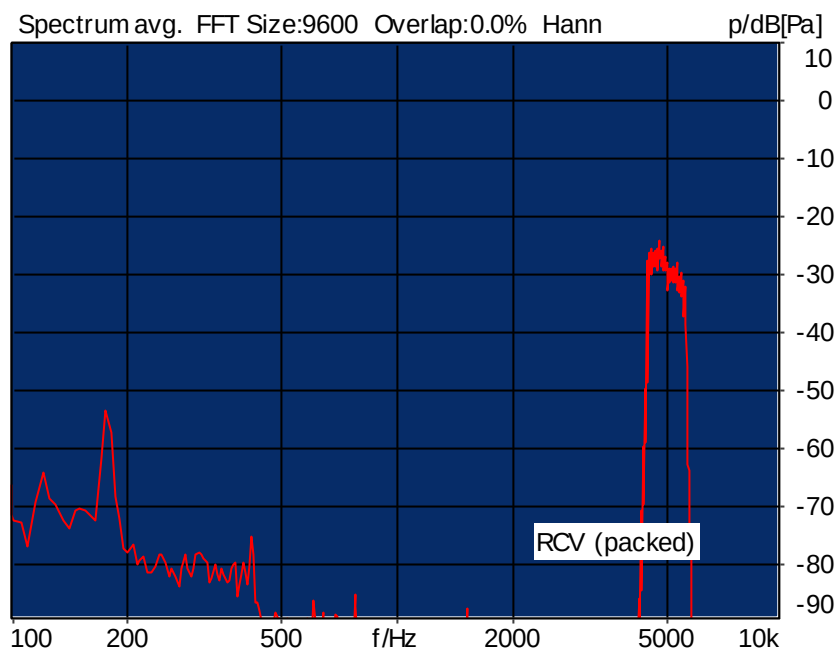
2025-08-18 下午 03:51 ACQUA 6.1.110

Limits

lower
20.00 dB

5.2 RCV Distortion and Noise - 5000 Hz 2N WB

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



Distortion (Noise) RCV (packed): 38.24 dB (1.22%) Ok

Ok

2025-08-18 下午 03:51 ACQUA 6.1.110

Limits

lower
20.00 dB



Report - Receive Distortion and Noise (Conversational Gain) 2N WB

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

Region	Frequency	SDNR
1	250Hz	29.24 dB
2	315Hz	31.13 dB
3	400Hz	29.21 dB
4	500Hz	30.47 dB
5	630Hz	27.28 dB
6	800Hz	27.95 dB
7	1000Hz	28.14 dB
8	1250Hz	22.07 dB
9	1600Hz	29.99 dB
10	2000Hz	31.83 dB
11	2500Hz	37.67 dB
12	3150Hz	35.83 dB
13	4000Hz	35.71 dB
14	5000Hz	38.24 dB

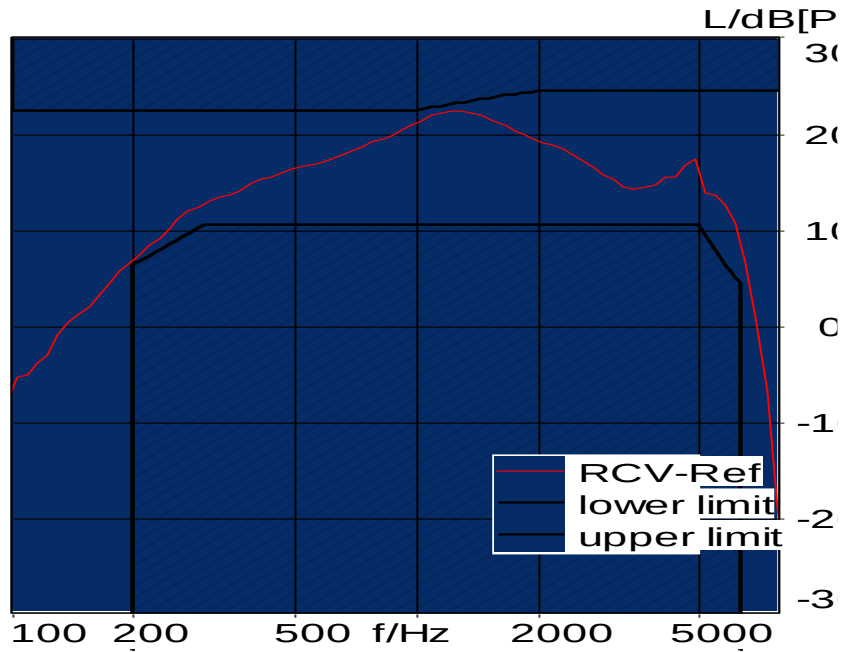
All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 22.07dB at 1250Hz.

2025-08-18 下午 03:51 ACQUA

5.3 Frequency Response 8N FF

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



Absolute minimal distance

0.73 dB at 1151.2 Hz Ok

Ok

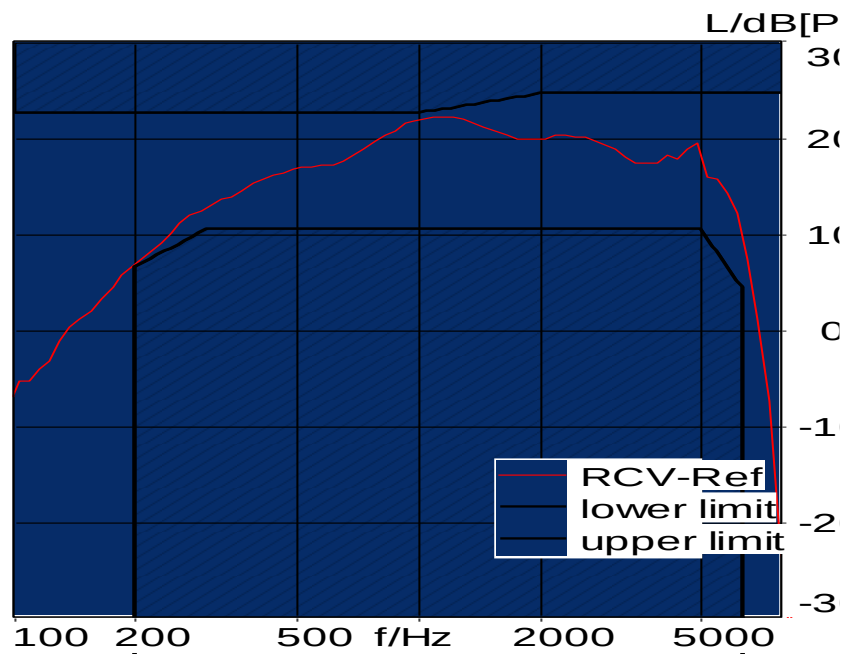
2025-08-18 下午 03:43 ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 8N DF

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



Absolute minimal distance

0.57 dB at 205.7 Hz Ok

Ok

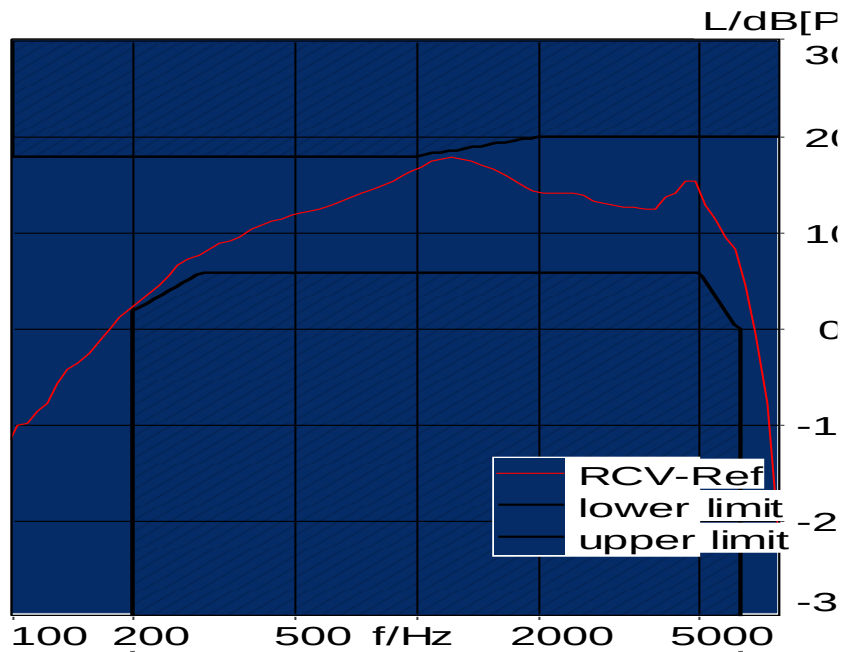
2025-08-18 下午 03:43 ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 2N FF

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



Absolute minimal distance

0.64 dB at 205.7 Hz Ok

Ok

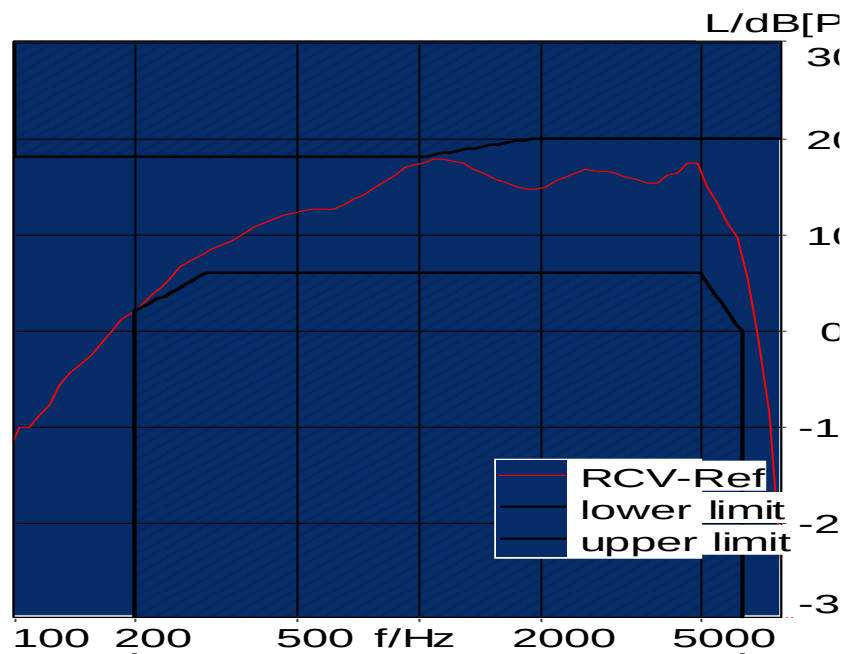
2025-08-18 下午 03:52 ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 2N DF

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



Absolute minimal distance

0.49 dB at 1088.7 Hz Ok

Ok

2025-08-18 下午 03:52 ACQUA 6.1.110

Limits

lower
Fit into tolerance



<Evaluation results for KDB 285076 D05 2.b>

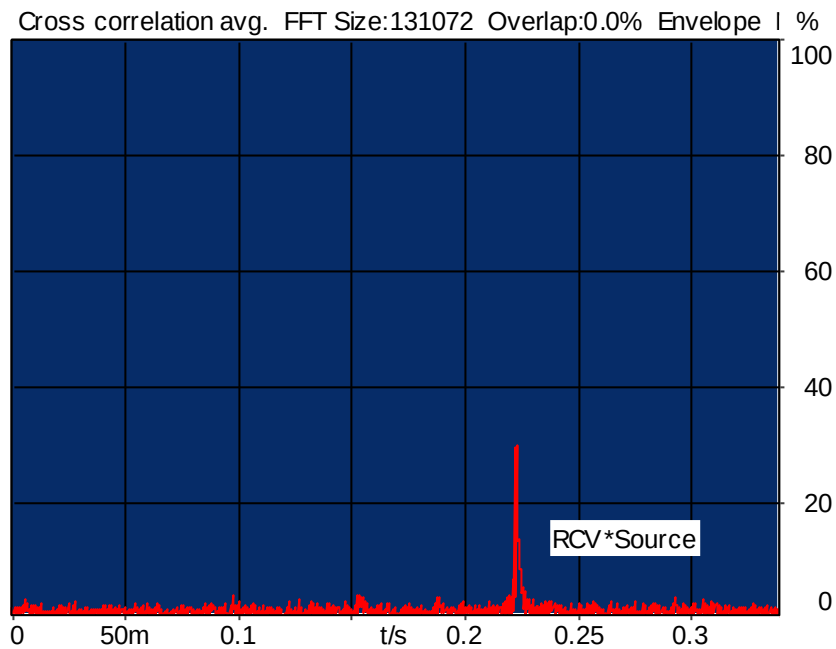
#2 WiFi 6GHz AMR WB 6.60kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	222.9
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	87.58
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	82.93



Overall Receive Delay WB

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

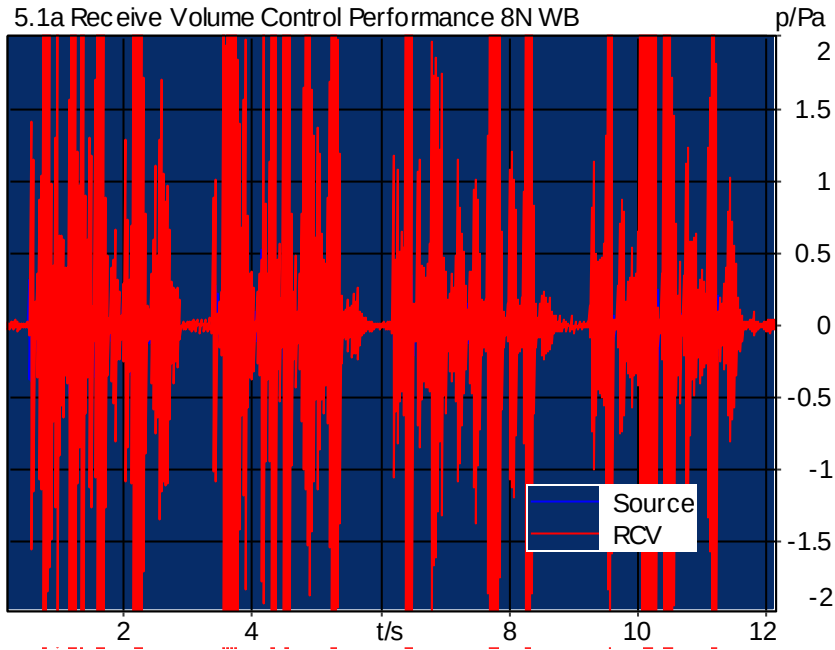


Channel	Delay	Correlation
RCV*Source	222.9 ms	29.96 %

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5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	87.58 dB[SPL]	80.18%	Ok

Ok

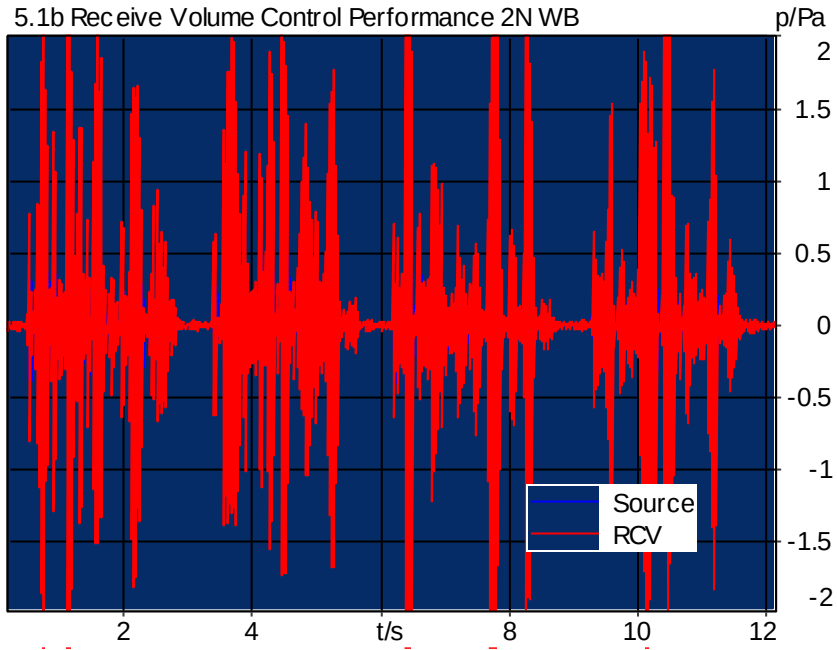
2025-08-18 下午 04:52 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	82.93 dB[SPL]	79.22%	Ok

Ok

2025-08-18 下午 04:53 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]