Appendix A.   Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.a>

#1 LTE B71 EVS WB 24.4kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	192.7
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	89.26
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.67
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.56
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.21
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.45
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.06
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.59
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.99
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.46
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.68
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.50
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.65
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.73
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.91
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.45
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	20.46
5.3 Frequency Response 8N DF	Ok	Min. dist. to tolerance scheme [dB], 1547.5 Hz	2.63
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	87.46
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.51
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.02
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.19
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.35
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.42
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.78
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.68
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.81
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.36
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.54
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.91
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.59
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.40
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.46
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	20.81
5.3 Frequency Response 2N DF	Ok	Min. dist. to tolerance scheme [dB], 1447.5 Hz	2.61

Overall Receive Delay WB

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

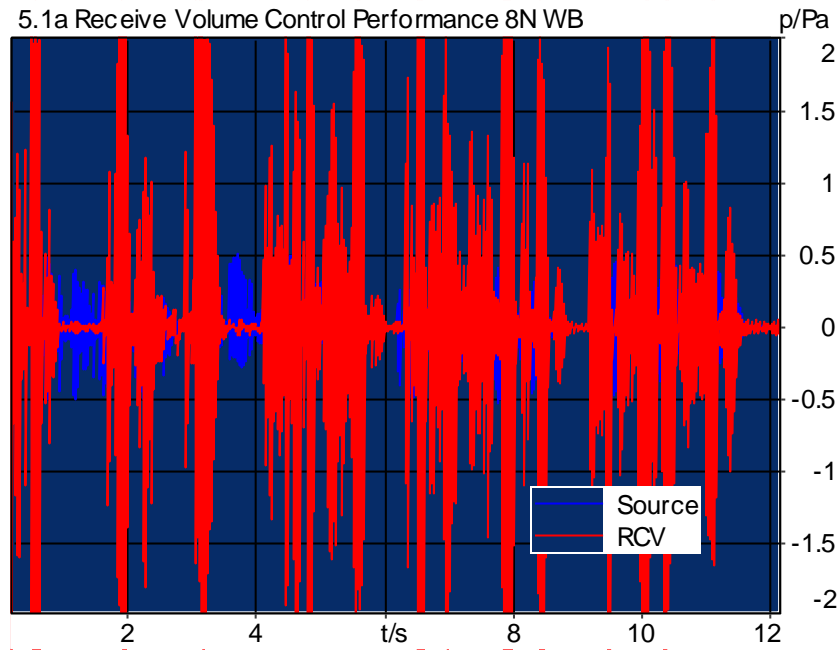Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope Ⅰ %
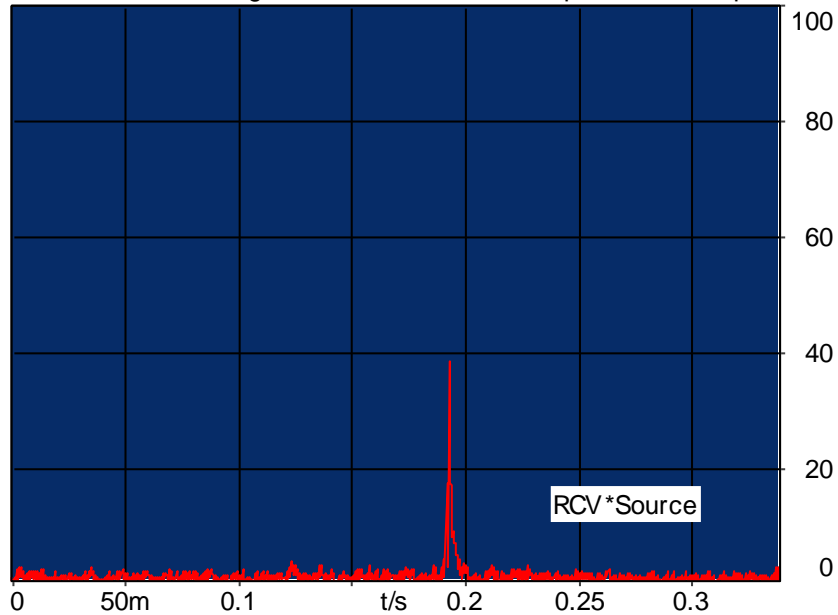
Channel	Delay	Correlation
RCV*Source	192.7 ms	38.74 %

2025-05-26 下午 06:24   ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

Channel	Speech level	Activity	
RCV	89.26 dB[SPL]	30.96%	Ok

Ok

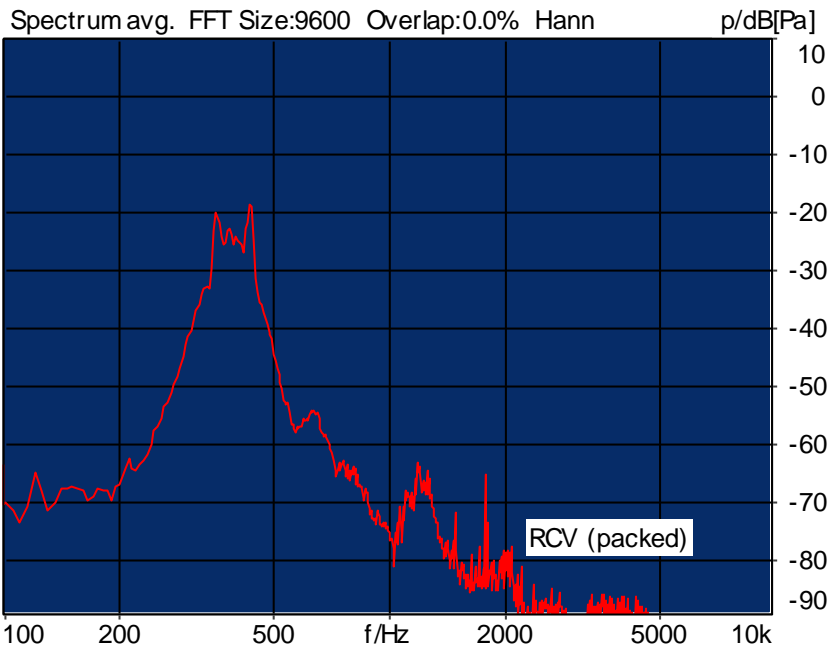2025-03-29 上午 06:09   ACQUA 6.1.110

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]
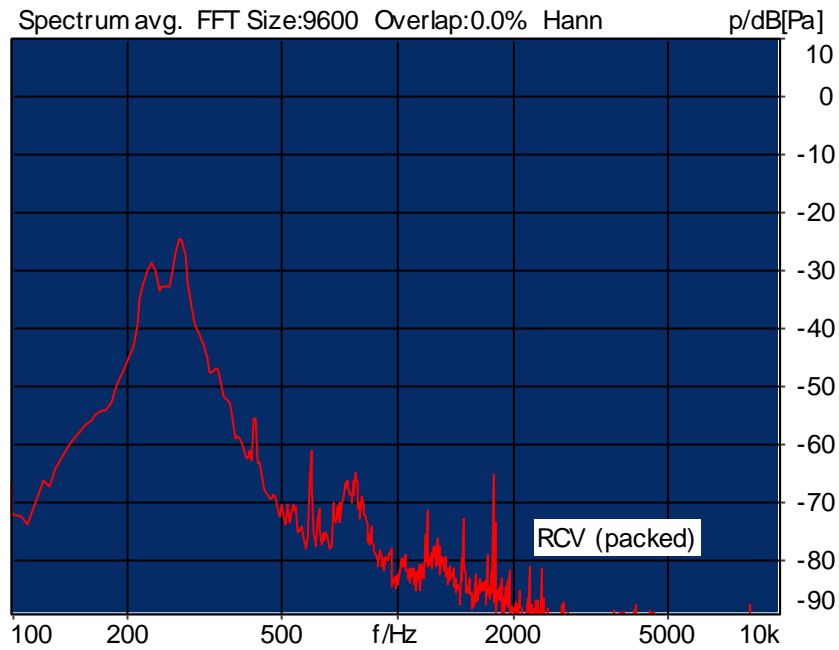
Distortion (Noise) RCV (packed): 25.67 dB (5.20%) Ok

Ok

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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
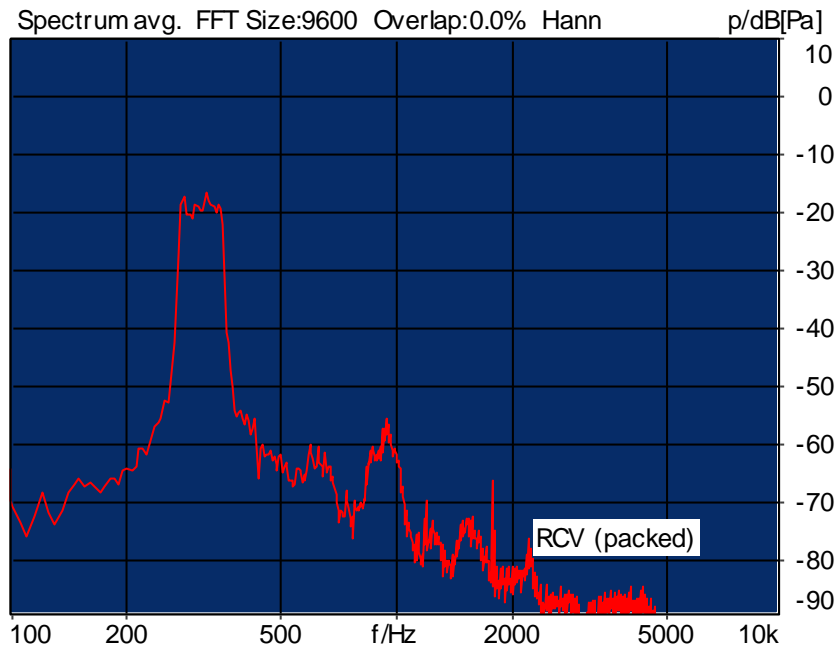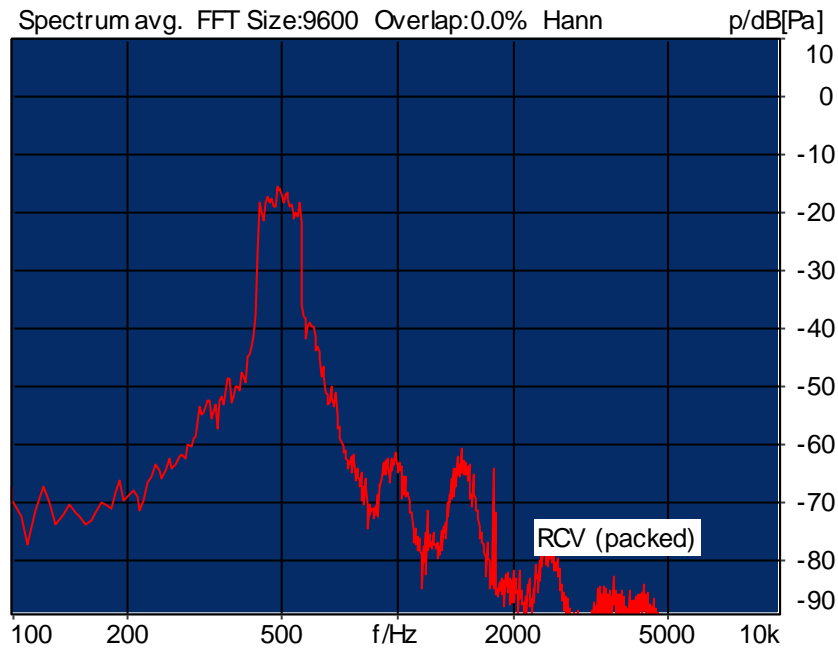

Distortion (Noise) RCV (packed): 35.56 dB (1.67%) Ok

Ok

2025-03-29 上午 06:01   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): 25.21 dB (5.49%) Ok
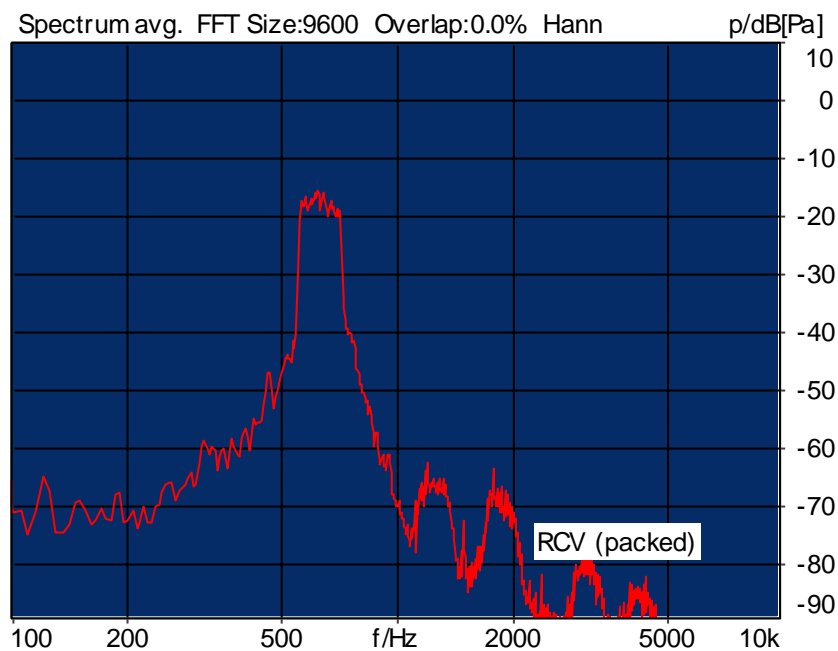
Ok

2025-03-29 上午 06:01   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 29.45 dB (3.37%) Ok

Ok

2025-03-29 上午 06:02   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): 29.06 dB (3.52%) Ok
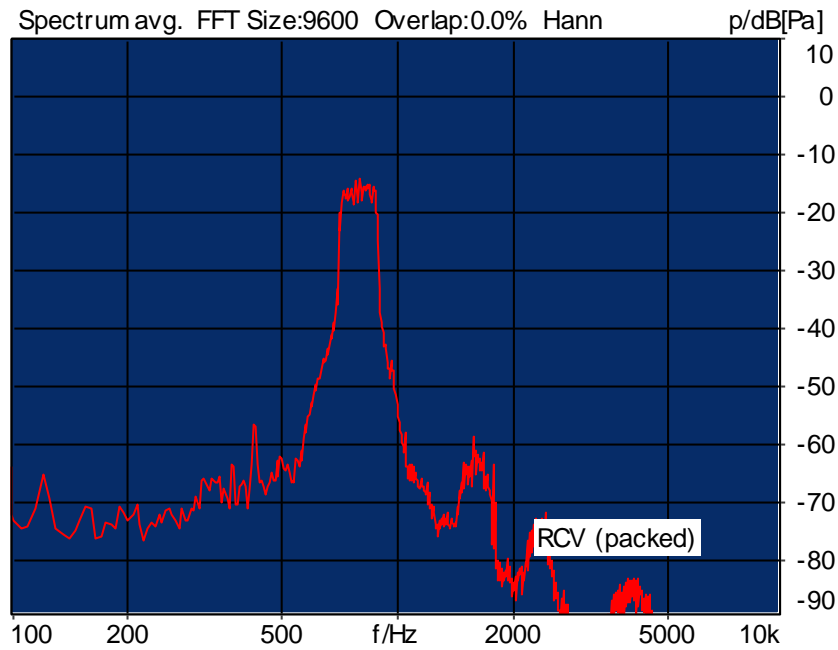
Ok

2025-03-29 上午 06:02   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
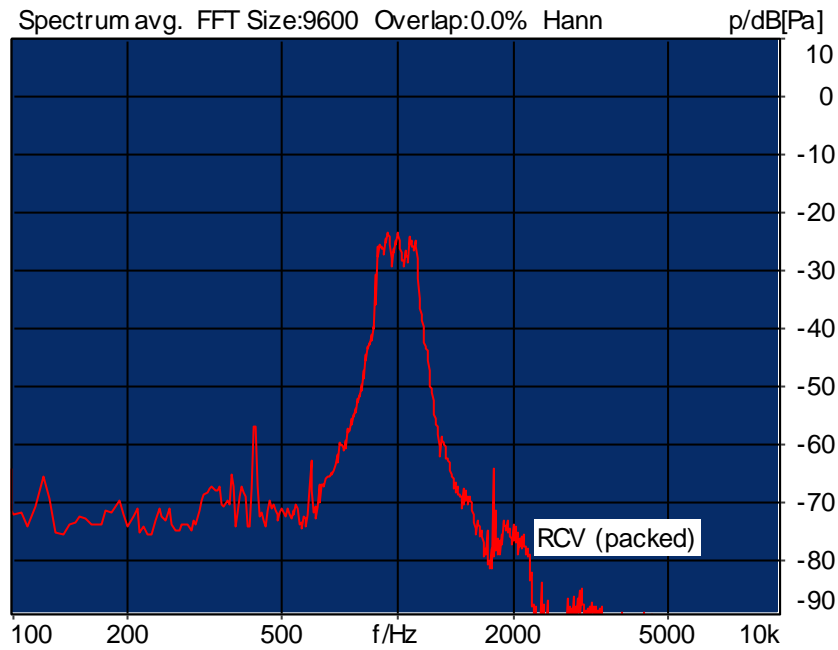

Distortion (Noise) RCV (packed): 31.59 dB (2.63%) Ok
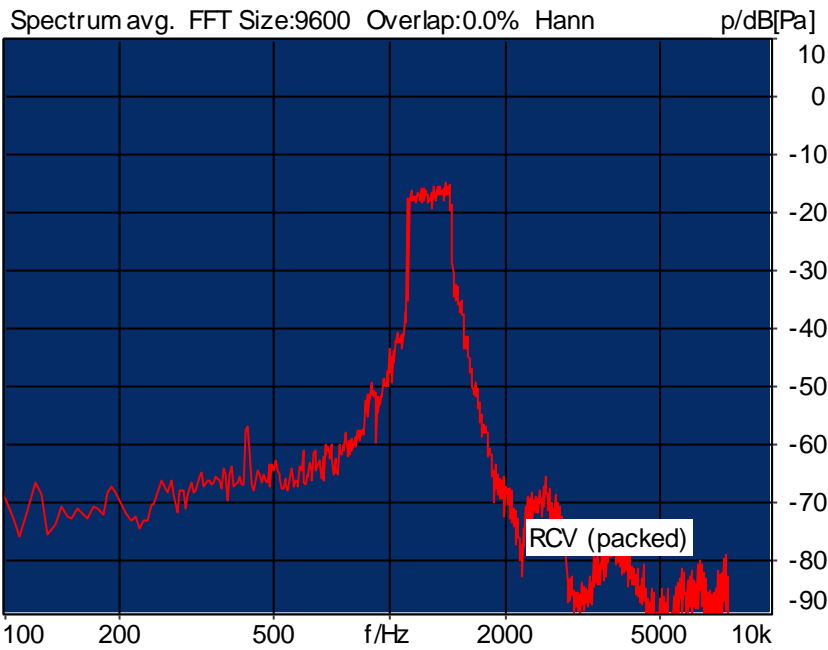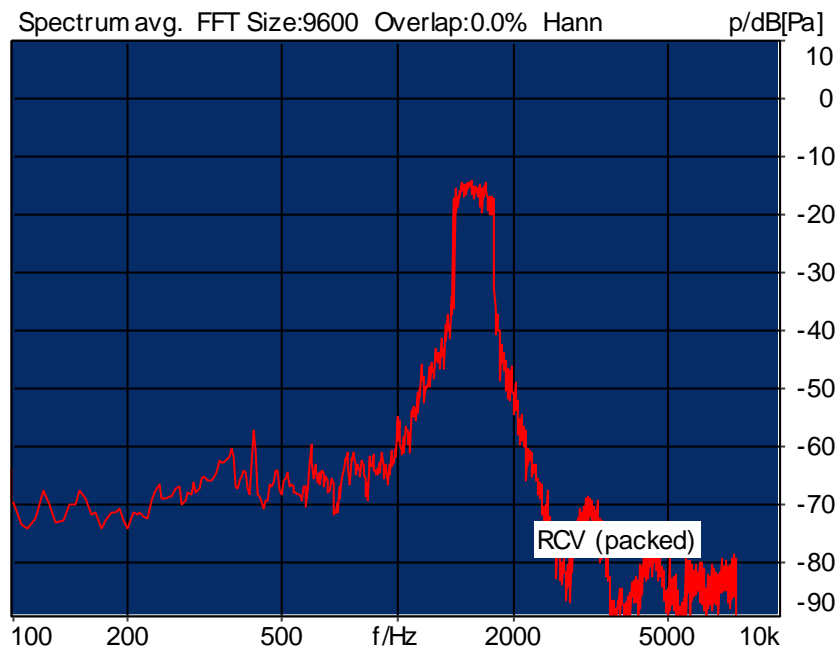
Ok

2025-03-29 上午 06:03   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 20.99 dB (8.92%) Ok

Ok

2025-03-29 上午 06:04   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

Spectrum avg. FFT Size:9600　Overlap:0.0%　Hann　　　　　p/dB[Pa]

Distortion (Noise) RCV (packed): 20.46 dB (9.49%) Ok

Ok

2025-03-29 上午 06:15　　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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 26.68 dB (4.64%) Ok

Ok

2025-03-29 上午 06:05   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
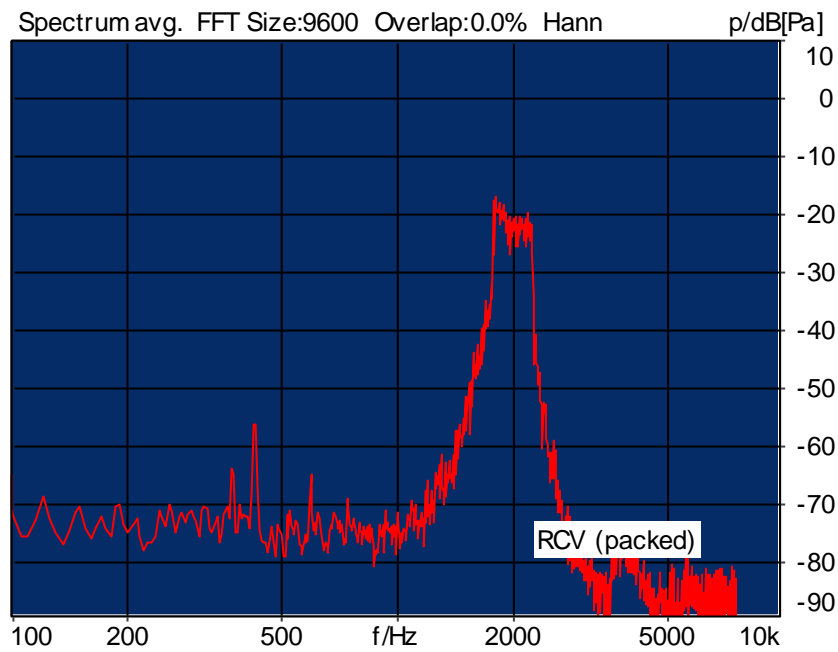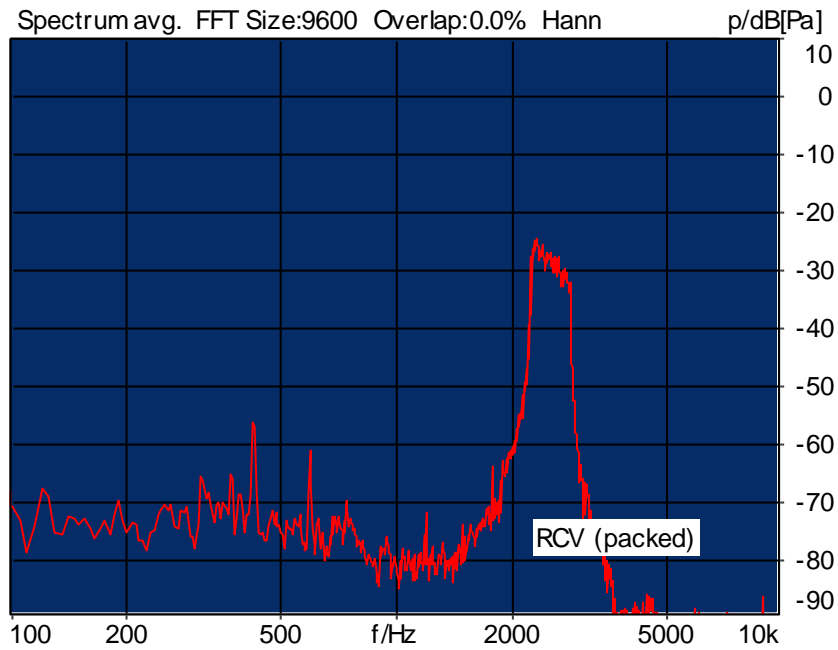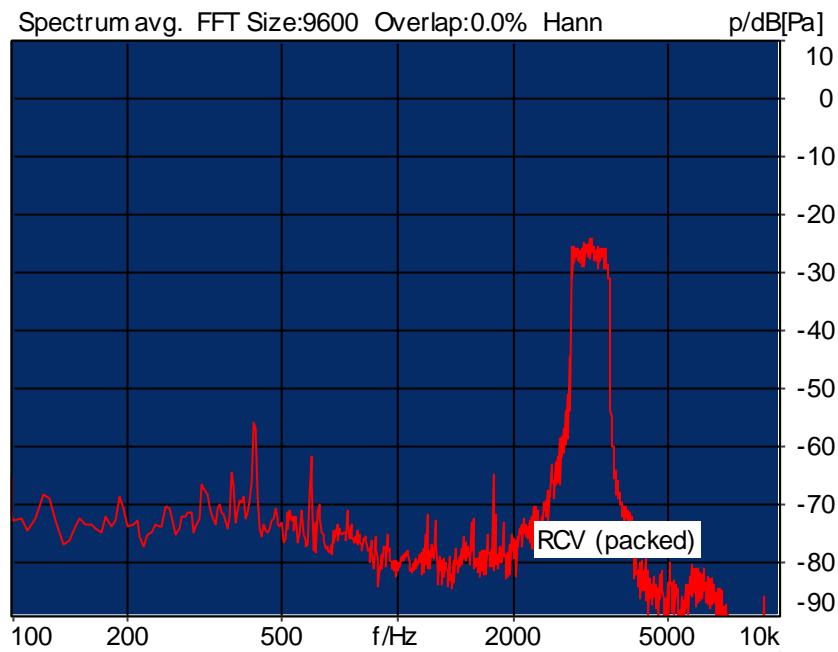

Distortion (Noise) RCV (packed): 21.50 dB (8.41%) Ok

Ok

2025-03-29 上午 06:15   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 25.65 dB (5.22%) Ok

Ok

2025-03-29 上午 06:06   ACQUA 6.1.110

Limits

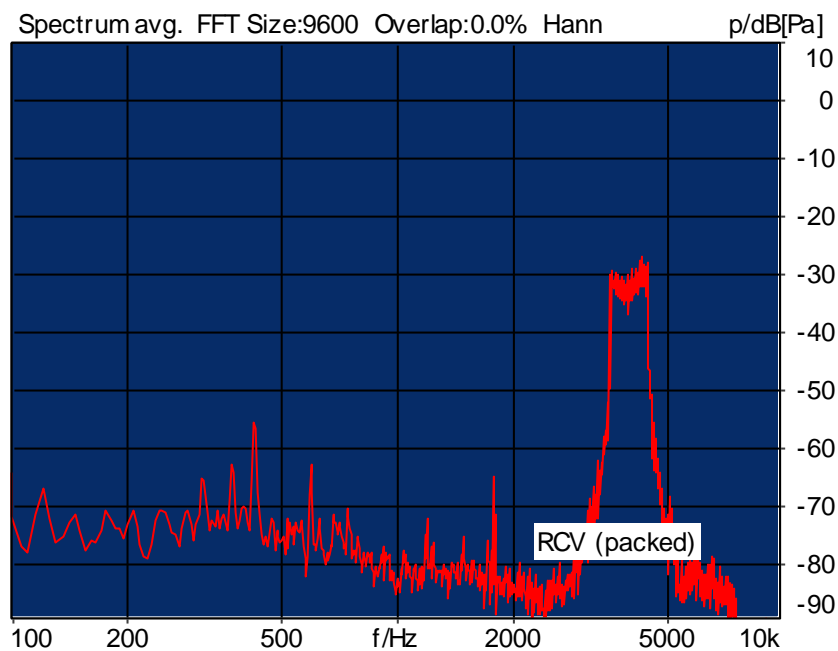| lower |
|-------|
| 20.00 dB |

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

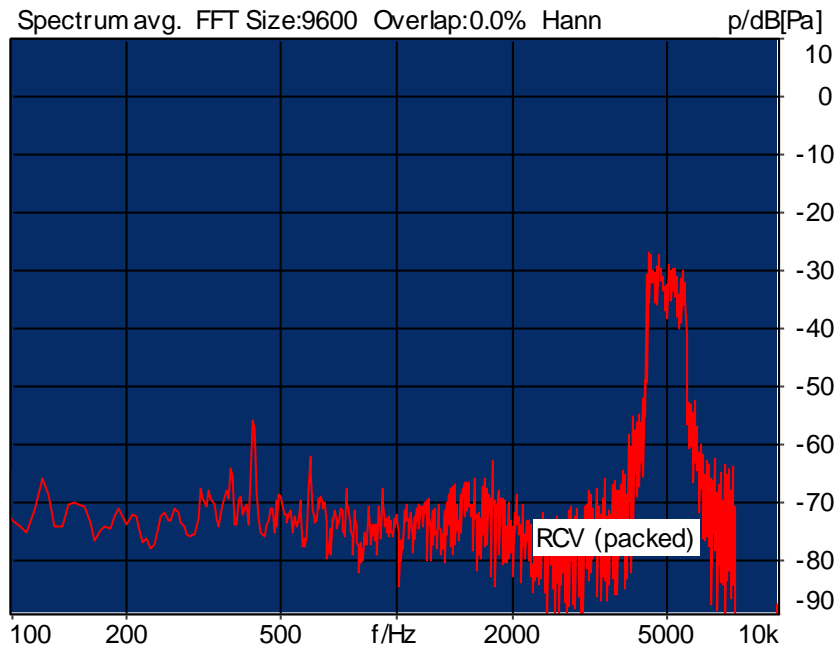Distortion (Noise) RCV (packed): 33.73 dB (2.06%) Ok

Ok

2025-03-29 上午 06:07   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

2025-03-29 上午 06:07   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 25.45 dB (5.34%) Ok

Ok

2025-03-29 上午 06:11   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	25.67 dB
2	315Hz	35.56 dB
3	400Hz	25.21 dB
4	500Hz	29.45 dB
5	630Hz	29.06 dB
6	800Hz	31.59 dB
7	1000Hz	20.99 dB
8	1600Hz	26.68 dB
9	2500Hz	25.65 dB
10	3150Hz	33.73 dB
11	4000Hz	26.91 dB
12	5000Hz	25.45 dB
13	2000Hz	21.50 dB
14	1250Hz	20.46 dB

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

Smallest SDNR was 20.46dB at 1250Hz.

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5.3 Frequency Response 8N DF

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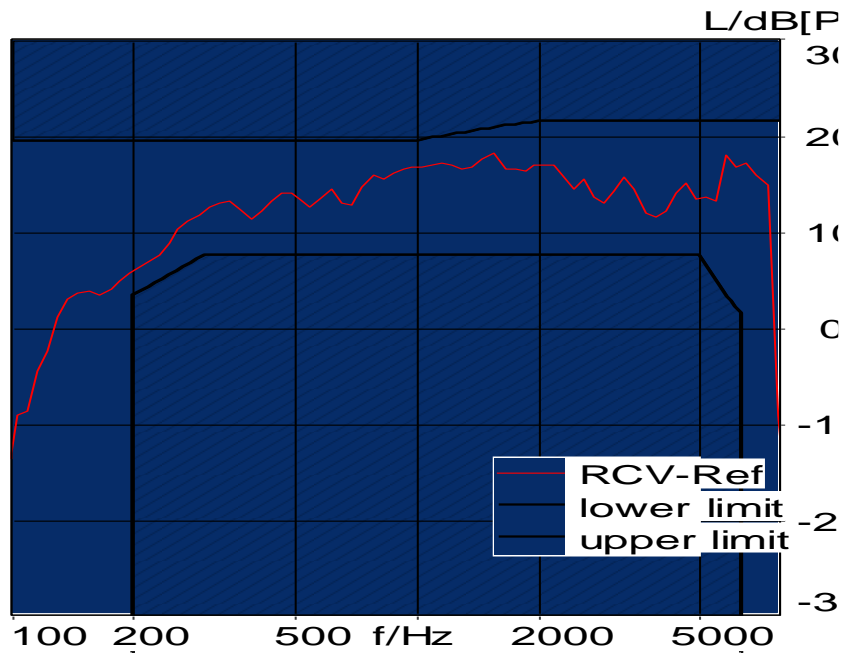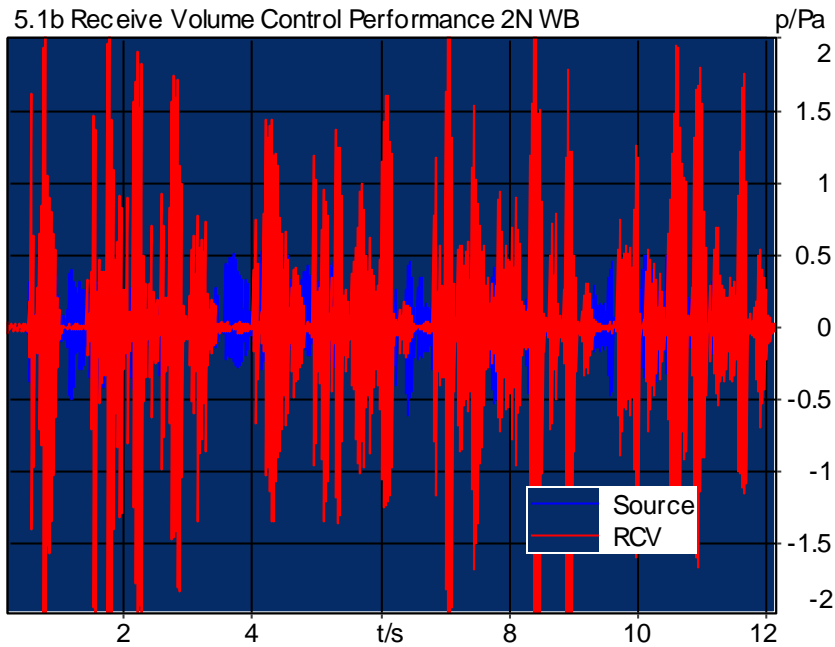

Absolute minimal distance

2.63 dB at 1547.5 Hz Ok

Ok

2025-03-29 上午 06:08   ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB

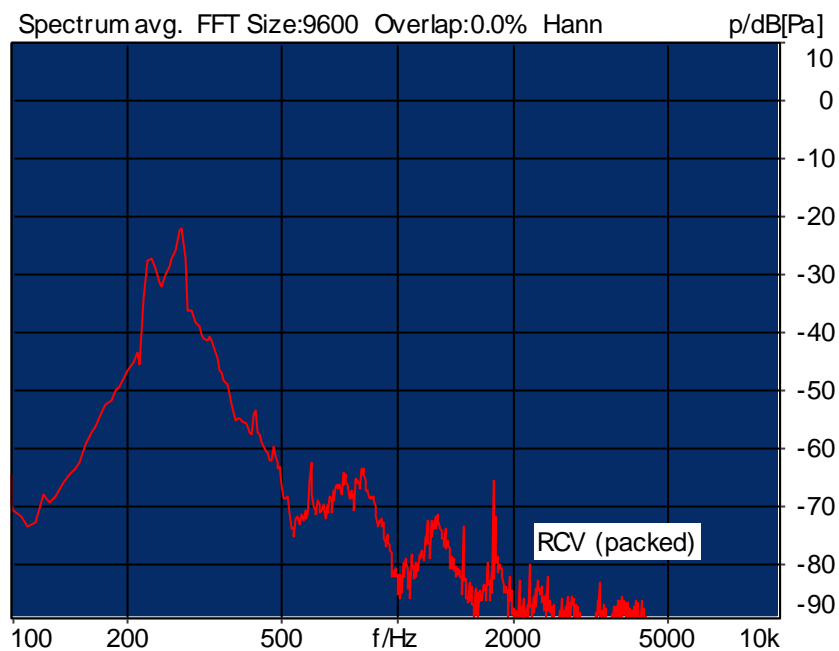| Channel	Speech level	Activity	
RCV	87.46 dB[SPL]	24.45%	Ok

Ok

2025-03-29 上午 06:48   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

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
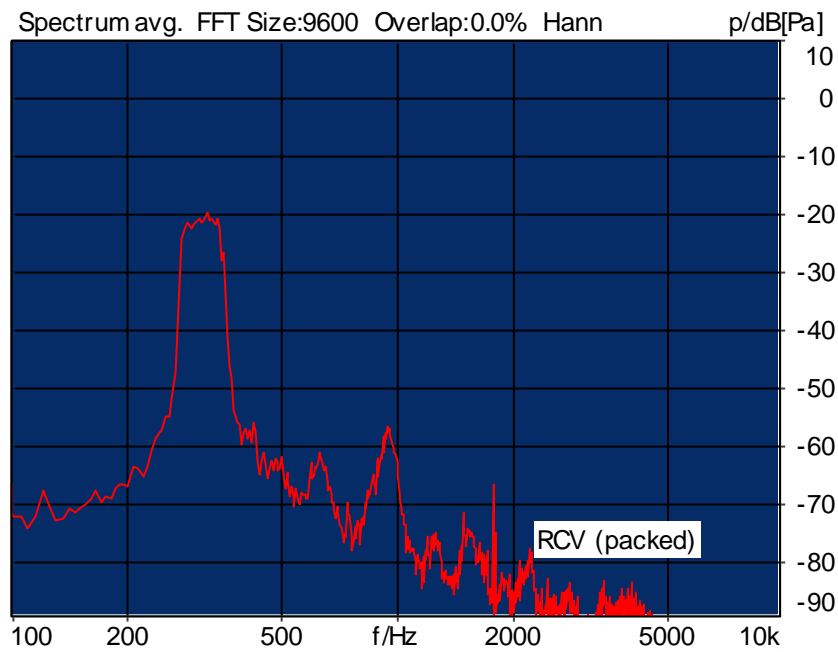

Distortion (Noise) RCV (packed): 23.51 dB (6.68%) Ok
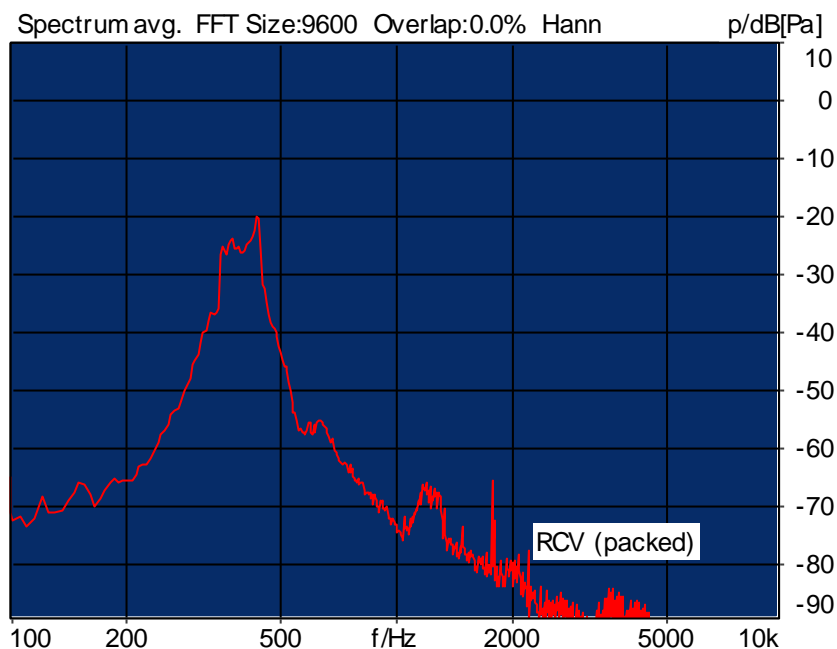
Ok

2025-03-29 上午 06:26   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 34.02 dB (1.99%) Ok

Ok

2025-03-29 上午 06:36   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): 24.19 dB (6.17%) Ok
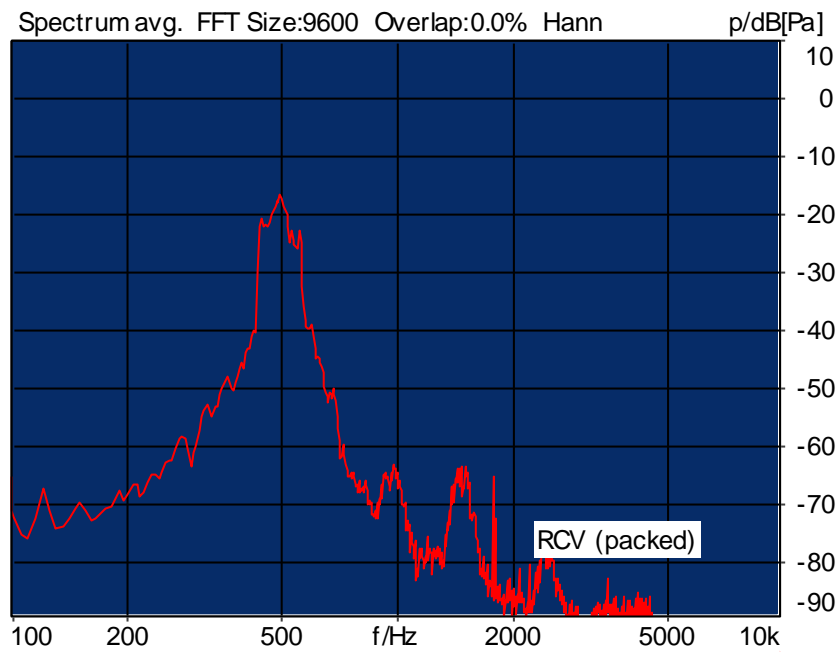
Ok

2025-03-29 上午 06:27　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
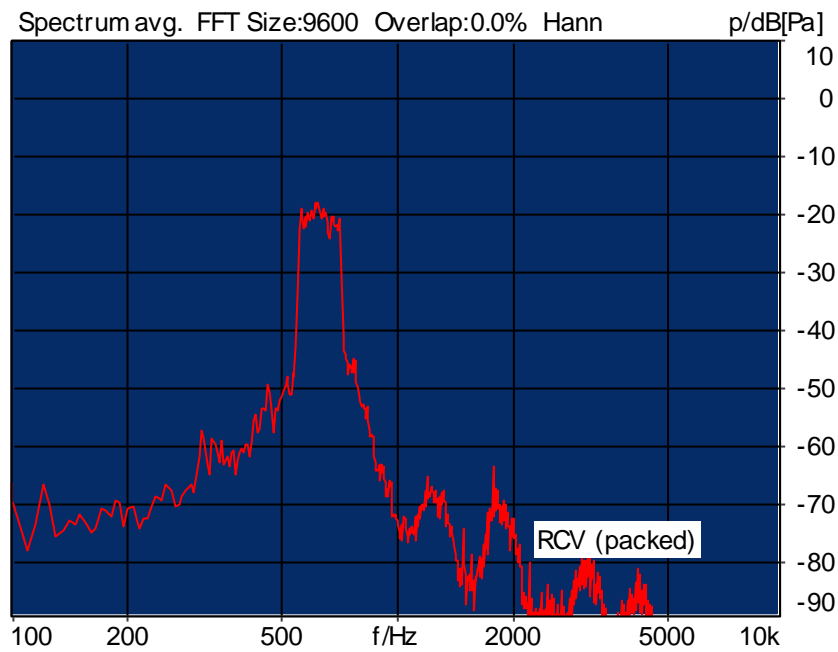

Distortion (Noise) RCV (packed): 27.35 dB (4.29%) Ok

Ok

2025-03-29 上午 06:28   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): 30.42 dB (3.01%) Ok

Ok

2025-03-29 上午 06:28   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
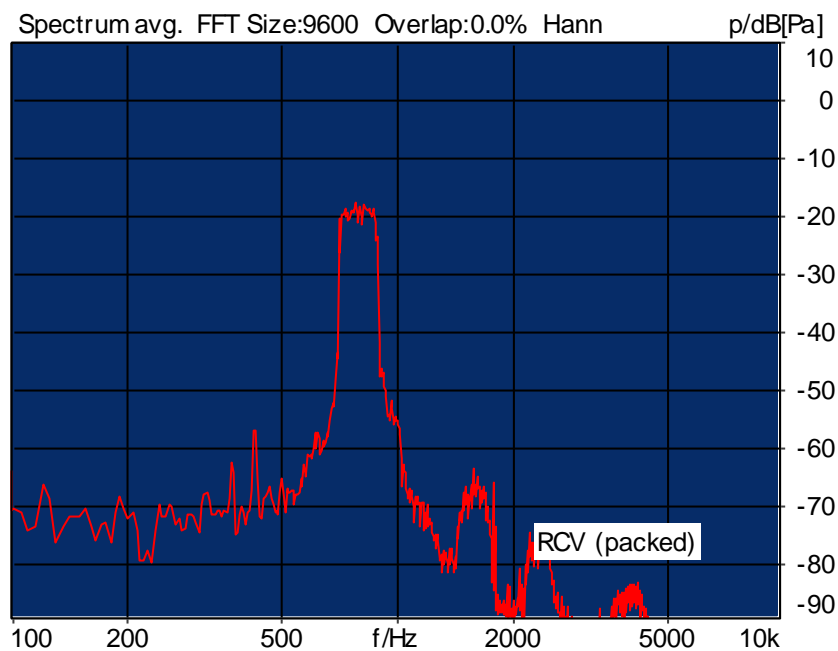

Distortion (Noise) RCV (packed): 35.78 dB (1.63%) Ok
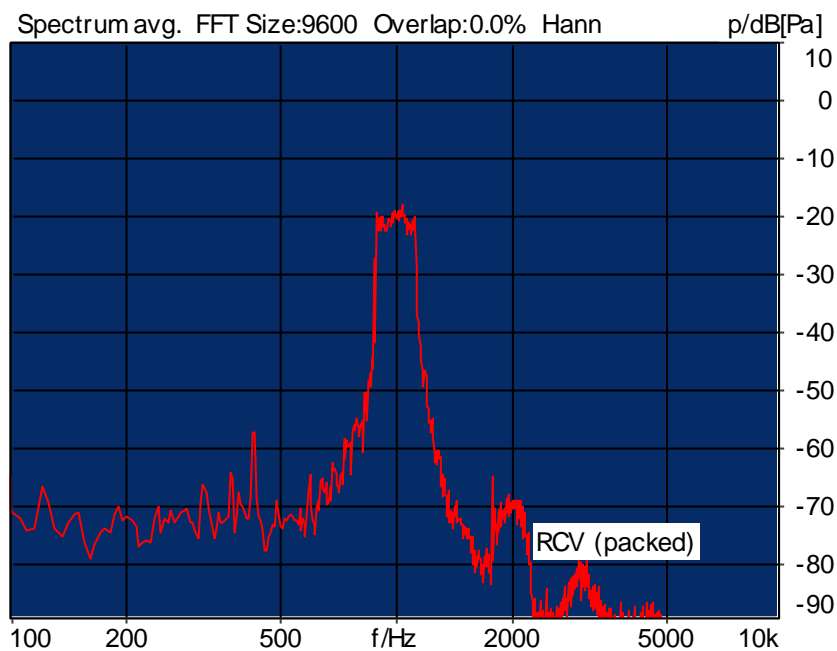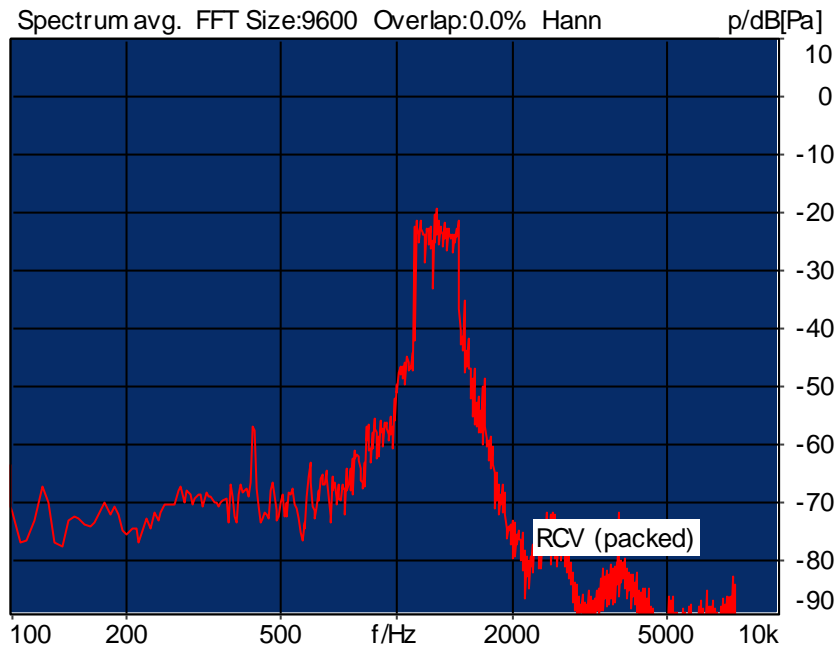
Ok

2025-03-29 上午 06:29   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

2025-03-29 上午 06:29   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

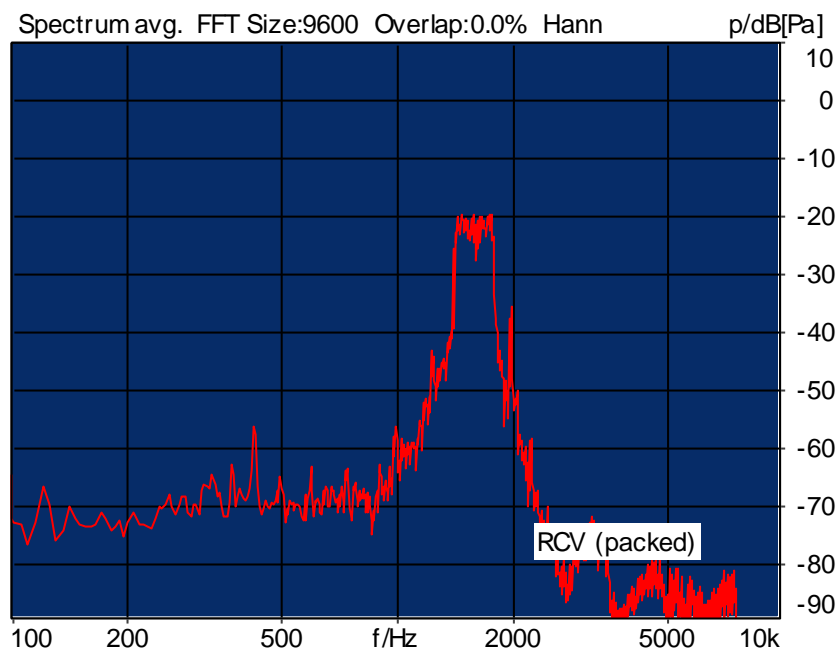Distortion (Noise) RCV (packed): 20.81 dB (9.11%) Ok

Ok

2025-03-29 上午 06:37   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

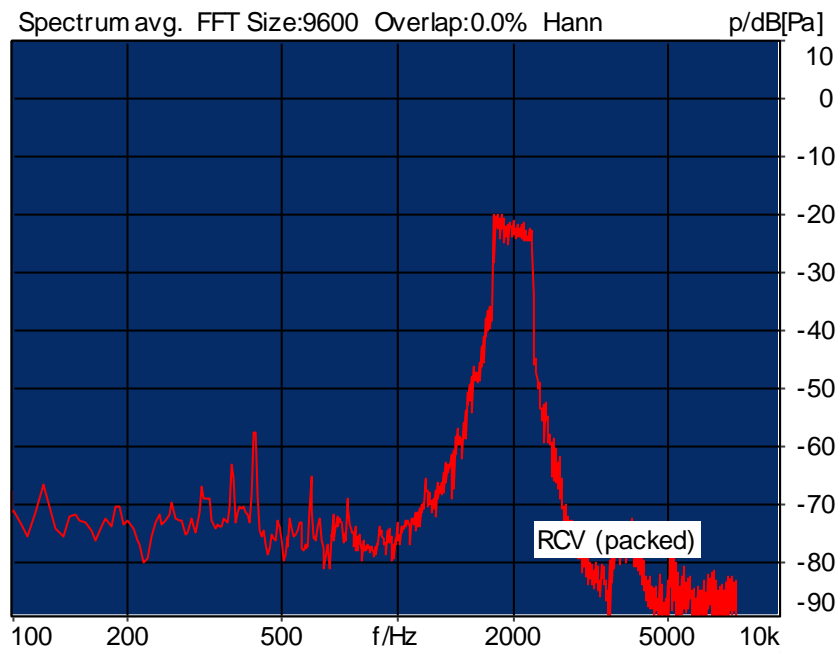Distortion (Noise) RCV (packed): 22.36 dB (7.62%) Ok

Ok

2025-03-29 上午 06:31   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

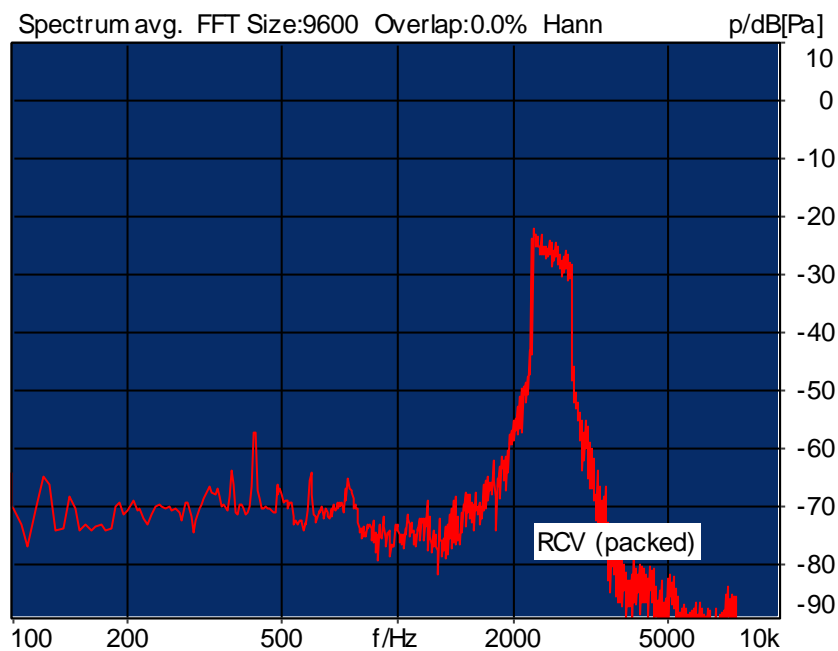Distortion (Noise) RCV (packed): 21.54 dB (8.37%) Ok

Ok

2025-03-29 上午 06:37   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann　　　　p/dB[Pa]

Distortion (Noise) RCV (packed): 25.91 dB (5.06%) Ok

Ok

2025-03-29 上午 06:32　ACQUA 6.1.110

Limits

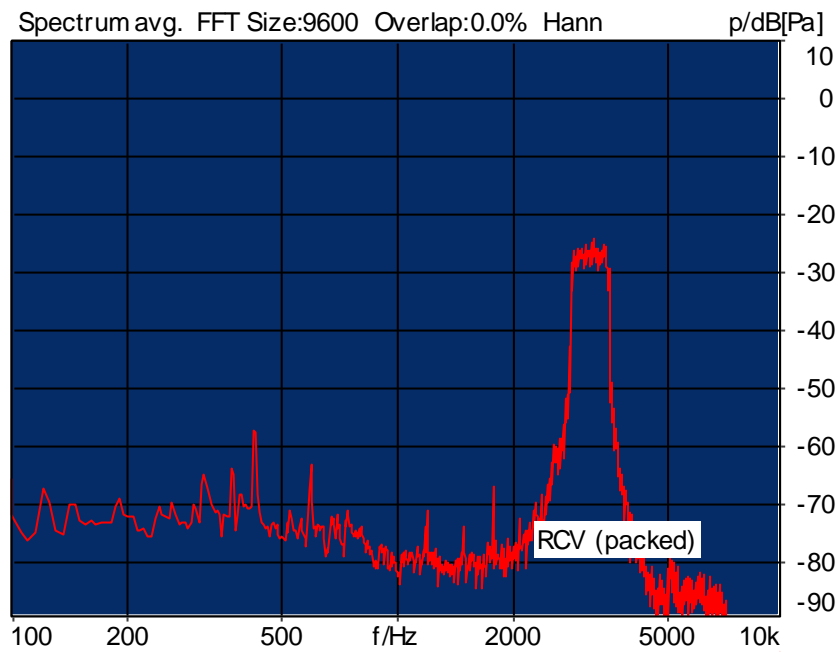| lower |
|-------|
| 20.00 dB |

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann

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

Ok

2025-03-29 上午 06:39   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
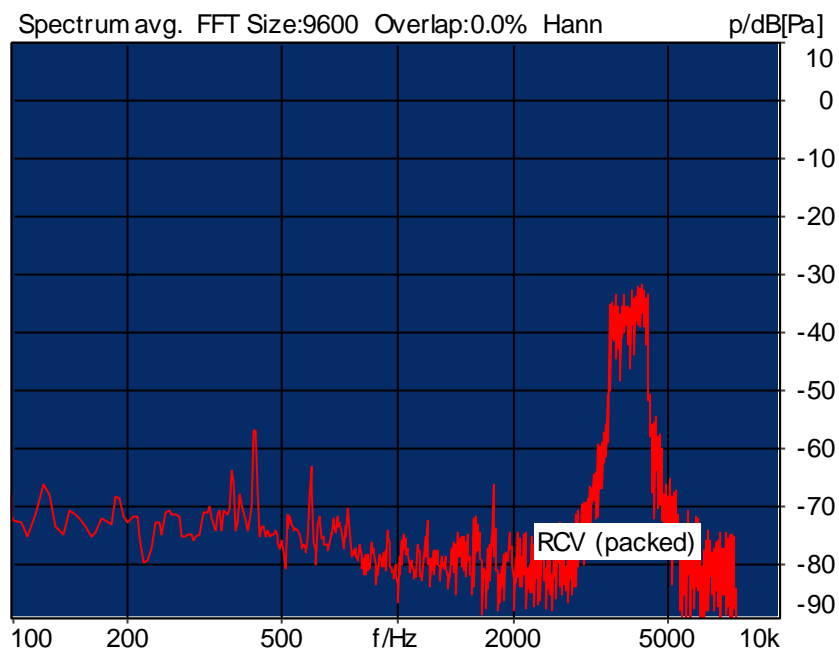

Distortion (Noise) RCV (packed): 23.40 dB (6.76%) Ok
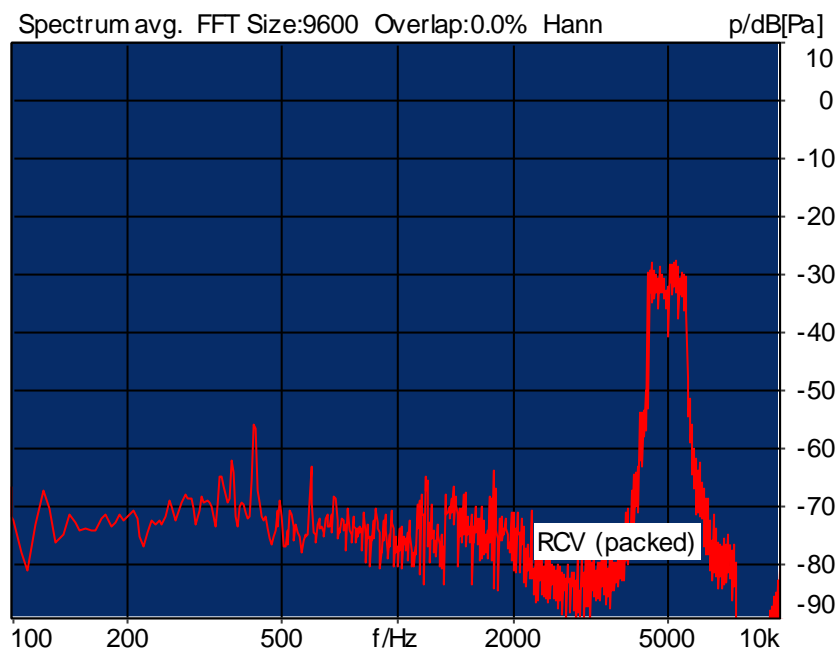
Ok

2025-03-29 上午 06:33   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 27.46 dB (4.24%) Ok

Ok

2025-03-29 上午 06:33   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	23.51 dB
2	400Hz	24.19 dB
3	500Hz	27.35 dB
4	630Hz	30.42 dB
5	800Hz	35.78 dB
6	1000Hz	31.68 dB
7	1600Hz	22.36 dB
8	2500Hz	25.91 dB
9	4000Hz	23.40 dB
10	5000Hz	27.46 dB
11	315Hz	34.02 dB
12	1250Hz	20.81 dB
13	2000Hz	21.54 dB
14	3150Hz	30.59 dB

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

Smallest SDNR was 20.81dB at 1250Hz.

2025-03-29 上午 06:39　 ACQUA

5.3 Frequency Response 2N DF

TIA-5050 (2018-01) \ Measurements \ Wideband
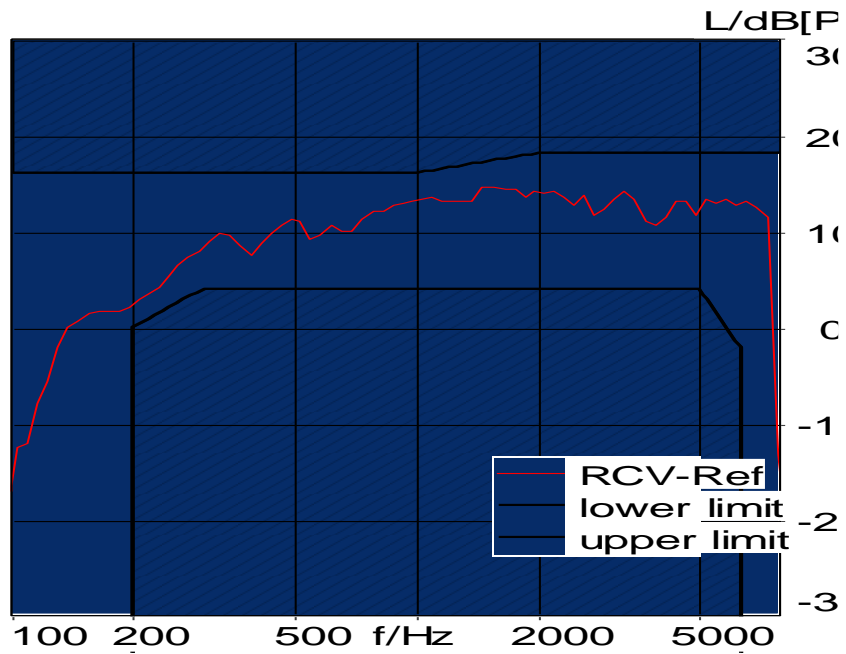
Absolute minimal distance

2.61 dB at 1447.5 Hz Ok

Ok

2025-03-29 上午 06:34   ACQUA 6.1.110

Limits

| lower |
| --- |
| Fit into tolerance |

#2 NR n12 EVS WB 24.4kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	191.8
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	90.53
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	89.34
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.24
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.45
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.70
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.28
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.76
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.01
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.77
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.95
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.54
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.87
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.29
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.44
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.70
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.43
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 2000Hz)	21.87
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.06
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.95
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.70
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.27
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.89
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.97
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.70
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.31
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.62
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.83
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.17
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.80
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.78
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.61
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 2000Hz)	22.83
5.3 Frequency Response 8N DF	Ok	Min. dist. to tolerance scheme [dB], 974.0 Hz	1.21
5.3 Frequency Response 2N DF	Ok	Min. dist. to tolerance scheme [dB], 974.0 Hz	1.18

Overall Receive Delay WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement
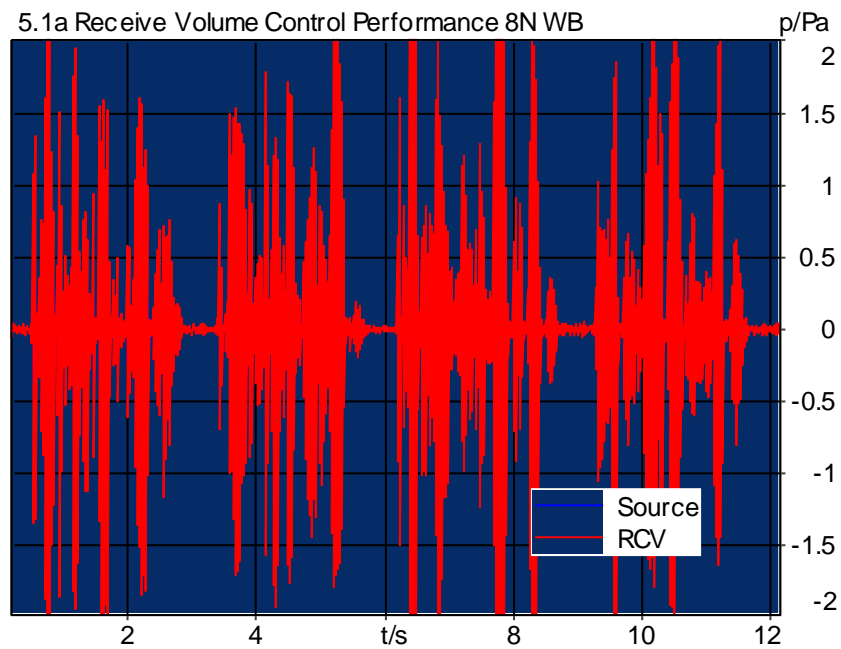
Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope I %
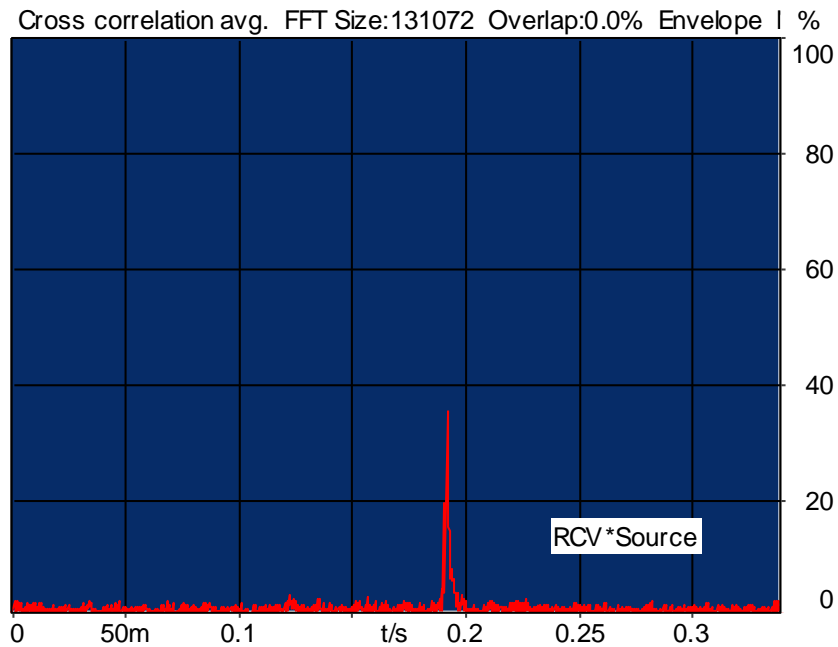
Channel	Delay	Correlation
RCV*Source	191.8 ms	35.50 %

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5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

Channel	Speech level	Activity	
RCV	90.53 dB[SPL]	16.89%	Ok

Ok

2025-04-19 上午 07:52   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB
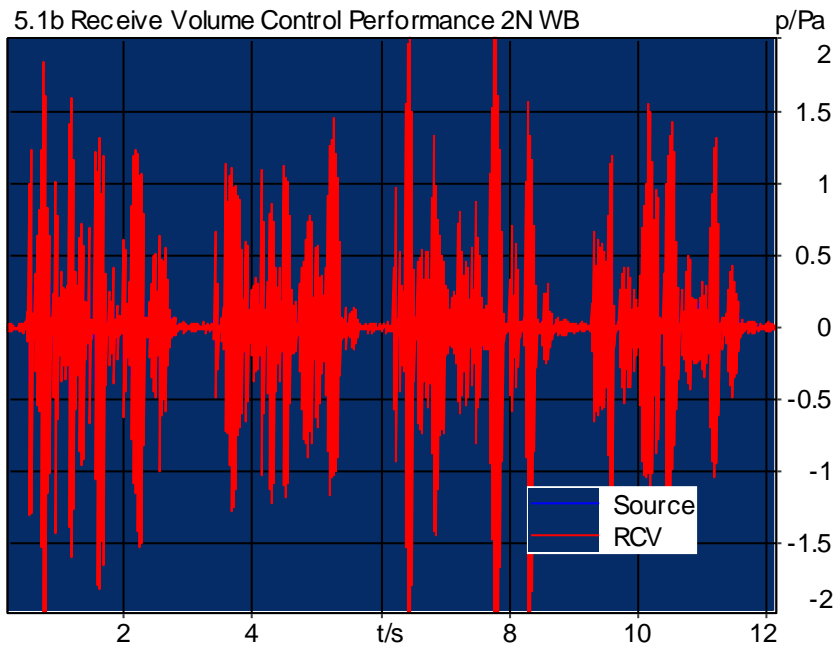
Channel	Speech level	Activity	
RCV	89.34 dB[SPL]	10.47%	Ok

Ok

2025-04-19 上午 08:12   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
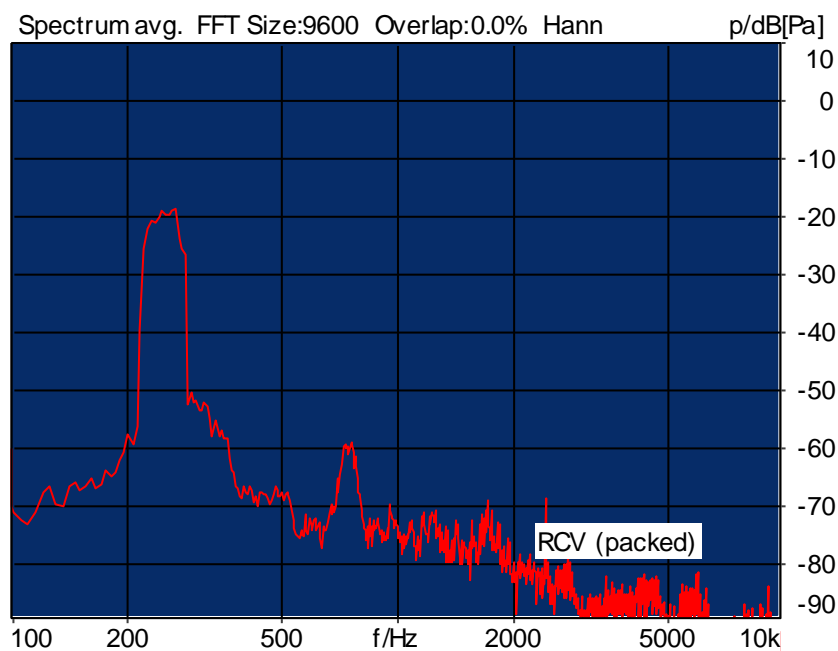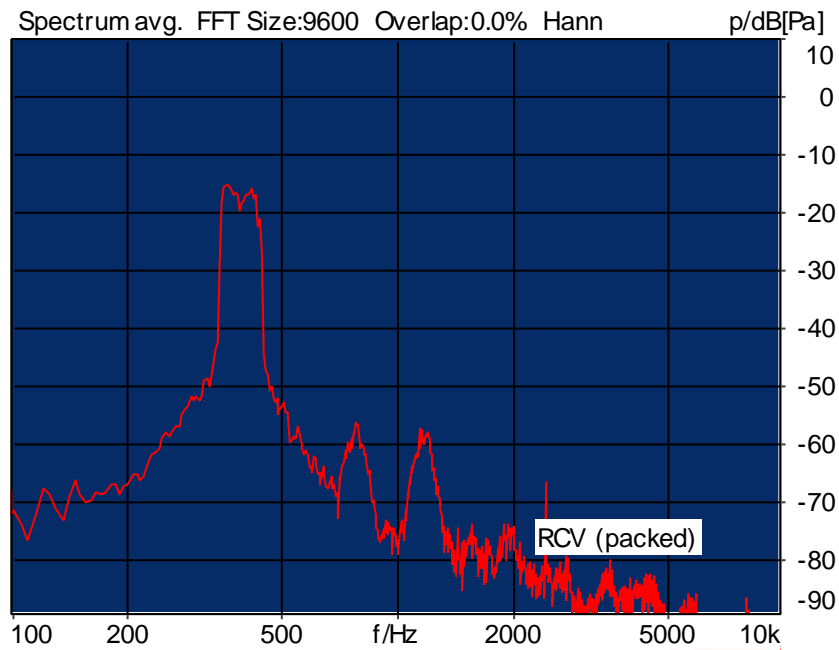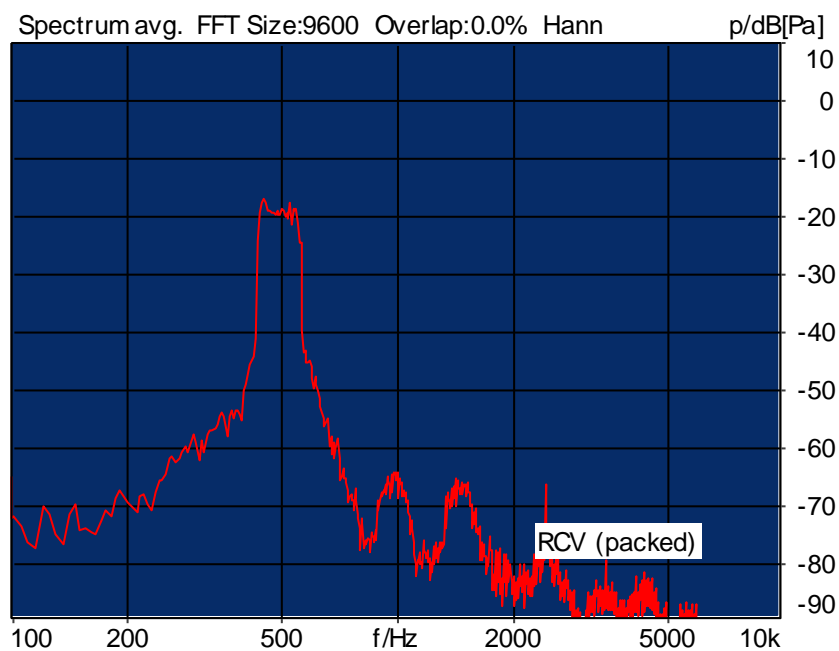

Distortion (Noise) RCV (packed): 35.24 dB (1.73%) Ok

Ok

2025-04-19 上午 07:53 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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]
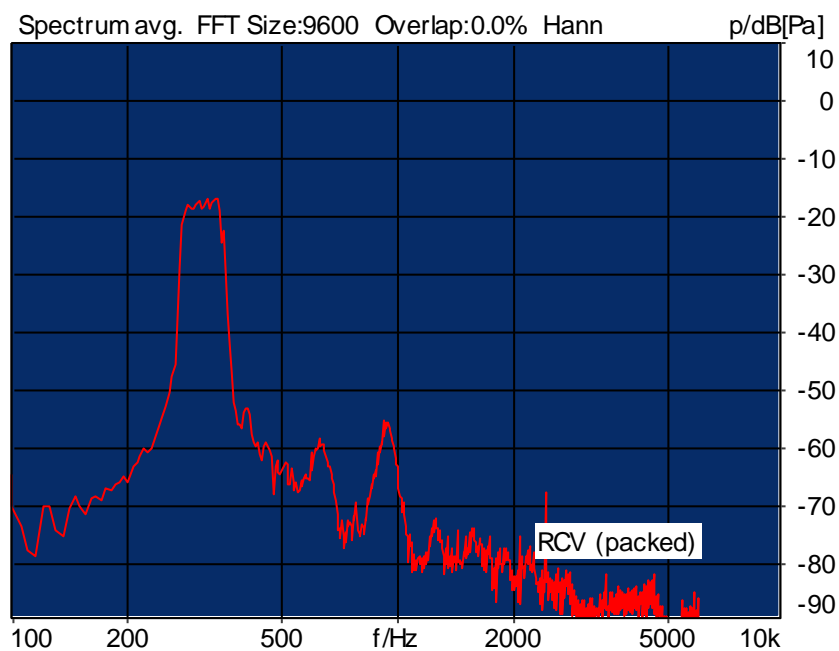
Distortion (Noise) RCV (packed): 35.45 dB (1.69%) Ok

Ok

2025-04-19 上午 07:54   ACQUA 6.1.110

Limits

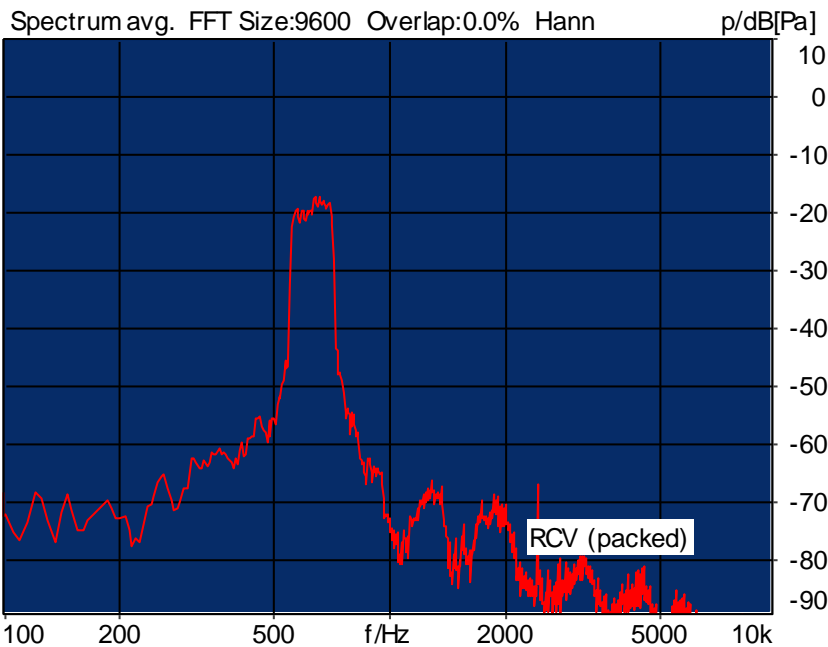| lower |
|-------|
| 20.00 dB |

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 35.70 dB (1.64%) Ok

Ok

2025-04-19 上午 07:54   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann　　　　　　　p/dB[Pa]

Distortion (Noise) RCV (packed): 34.28 dB (1.93%) Ok

Ok

2025-04-19 上午 07:55　　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
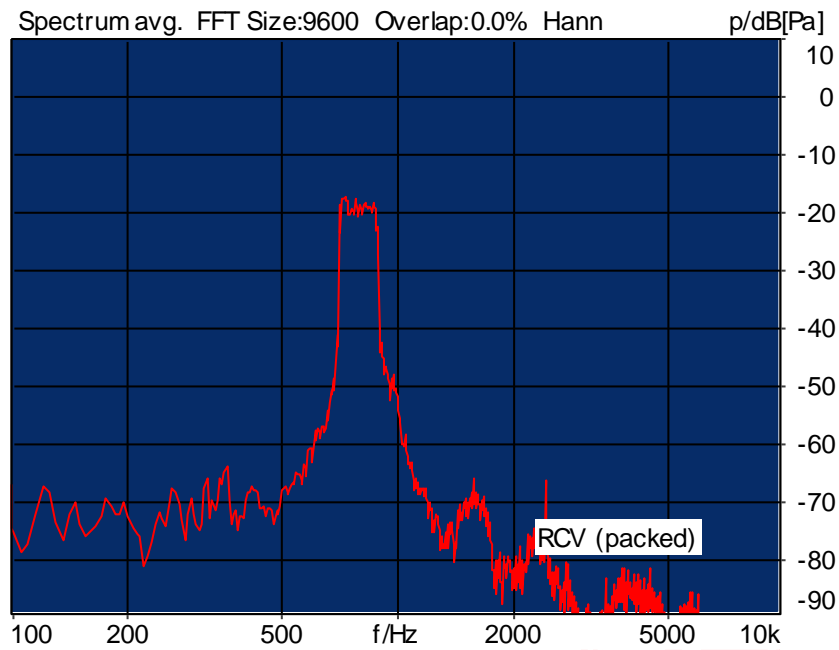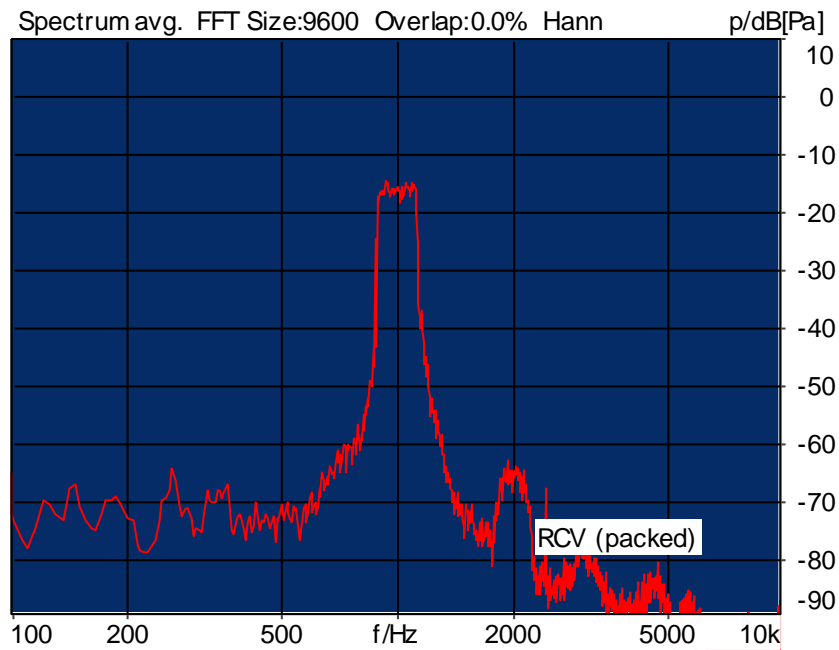

Distortion (Noise) RCV (packed): 35.76 dB (1.63%) Ok

Ok

2025-04-19 上午 07:55   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann　　　　p/dB[Pa]

Distortion (Noise) RCV (packed): 33.01 dB (2.24%) Ok

Ok

2025-04-19 上午 07:56 　 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): 33.77 dB (2.05%) Ok
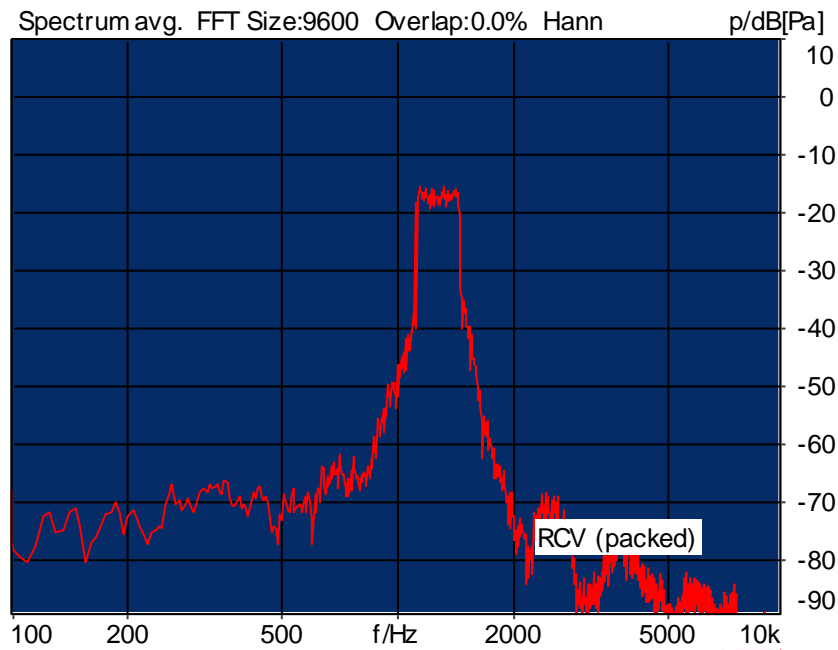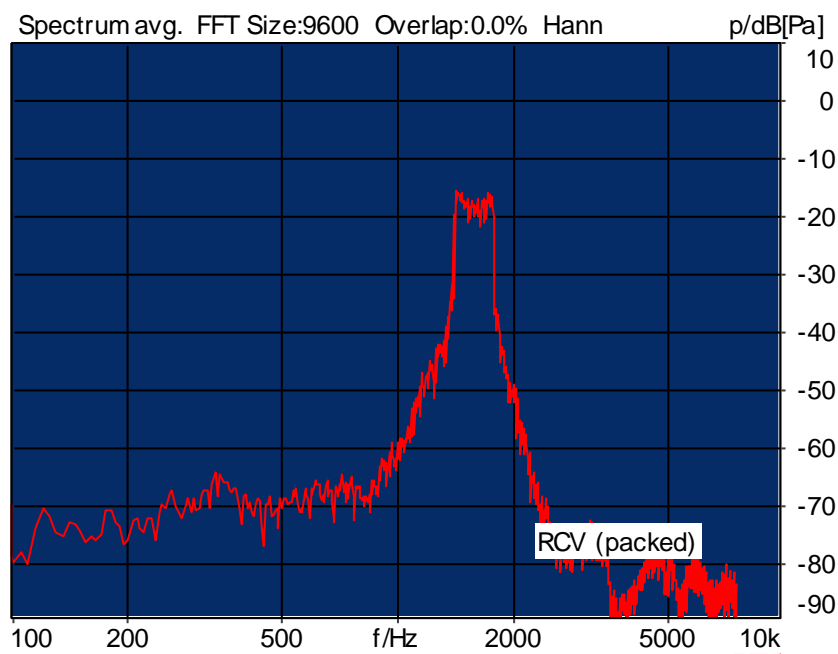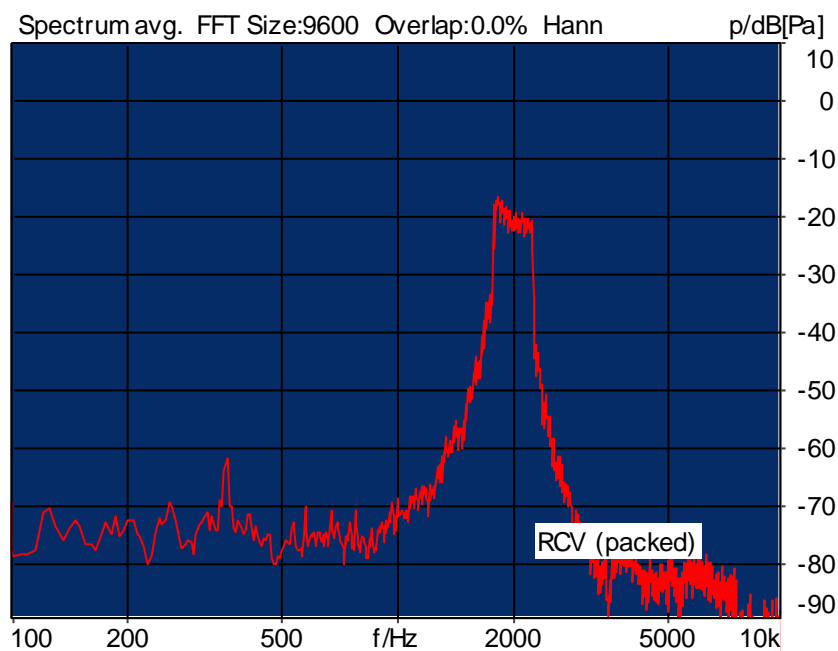
Ok

2025-04-19 上午 07:57   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 23.95 dB (6.35%) Ok

Ok

2025-04-19 上午 07:57   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 24.54 dB (5.93%) Ok

Ok

2025-04-19 上午 07:58   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

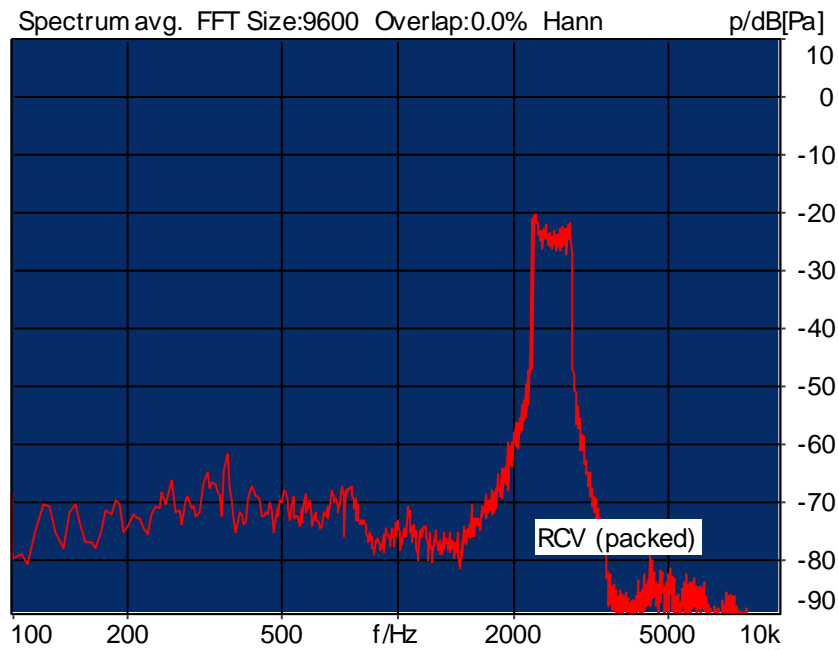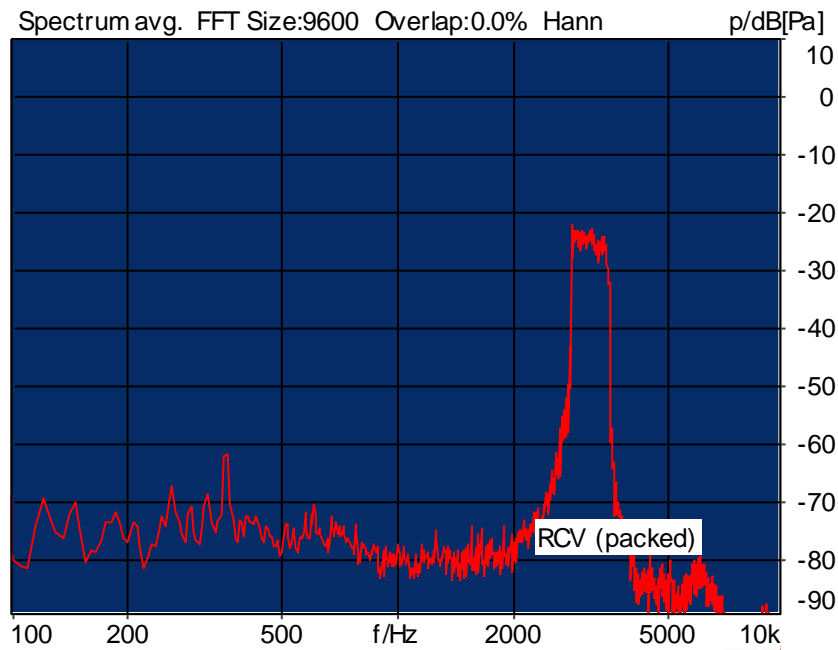Distortion (Noise) RCV (packed): 21.87 dB (8.06%) Ok

Ok

2025-04-19 上午 07:58   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 30.29 dB (3.06%) Ok

Ok

2025-04-19 上午 07:59   ACQUA 6.1.110

Limits

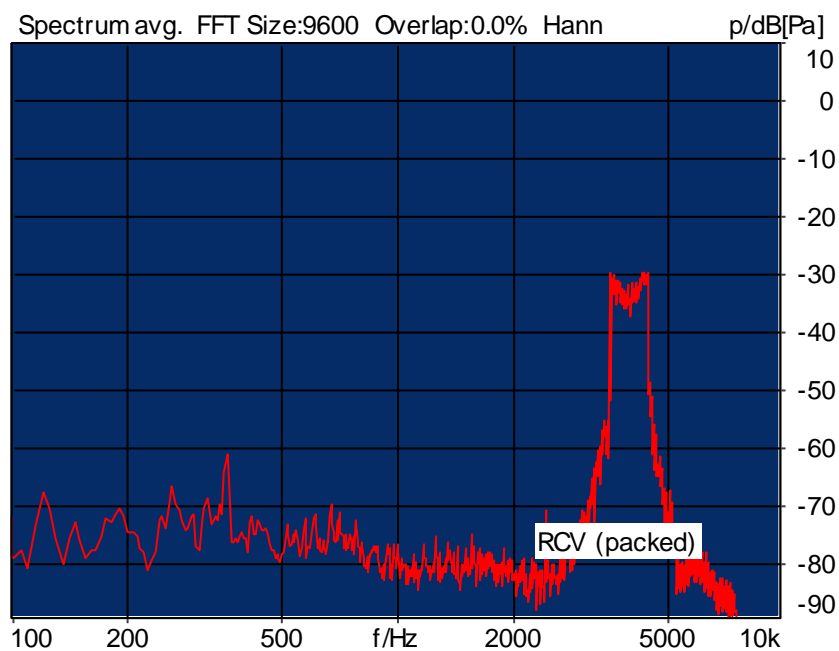| lower |
|---|
| 20.00 dB |

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 34.44 dB (1.90%) Ok

Ok

2025-04-19 上午 08:00   ACQUA 6.1.110

Limits

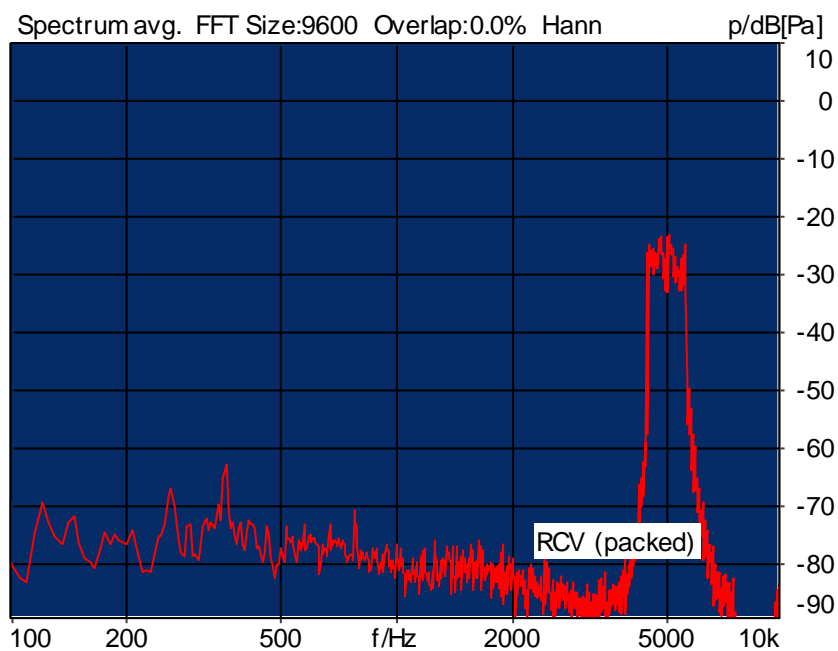| lower |
|---|
| 20.00 dB |

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

Spectrum avg.　FFT Size:9600　Overlap:0.0%　Hann　　　　p/dB[Pa]

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

Ok

2025-04-19　上午　08:00　　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): 33.43 dB (2.13%) Ok

Ok

2025-04-19 上午 08:01   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	35.24 dB
2	315Hz	35.45 dB
3	400Hz	35.70 dB
4	500Hz	34.28 dB
5	630Hz	35.76 dB
6	800Hz	33.01 dB
7	1000Hz	33.77 dB
8	1250Hz	23.95 dB
9	1600Hz	24.54 dB
10	2000Hz	21.87 dB
11	2500Hz	30.29 dB
12	3150Hz	34.44 dB
13	4000Hz	25.70 dB
14	5000Hz	33.43 dB

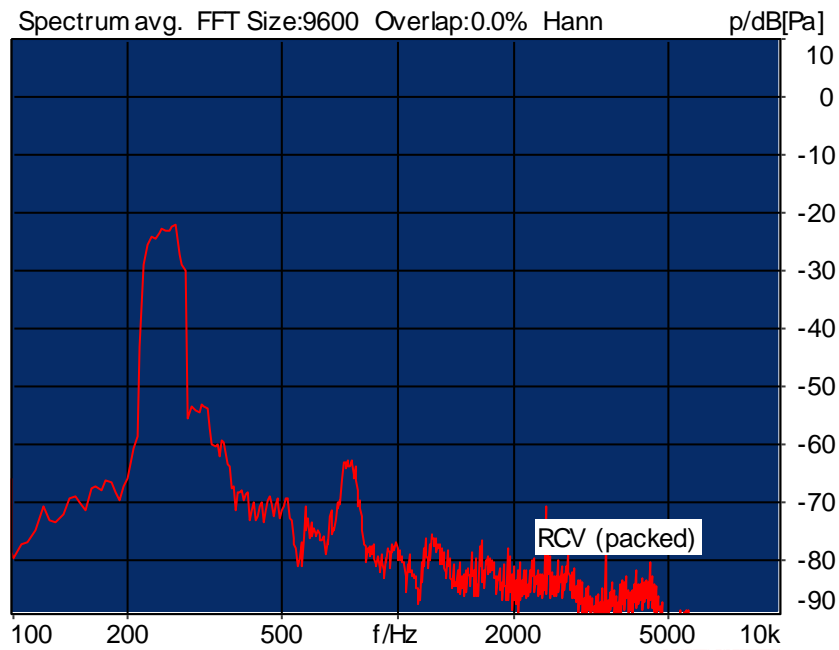All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 21.87dB at 2000Hz.

2025-04-19 上午 08:01   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

2025-04-19 上午 08:03   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
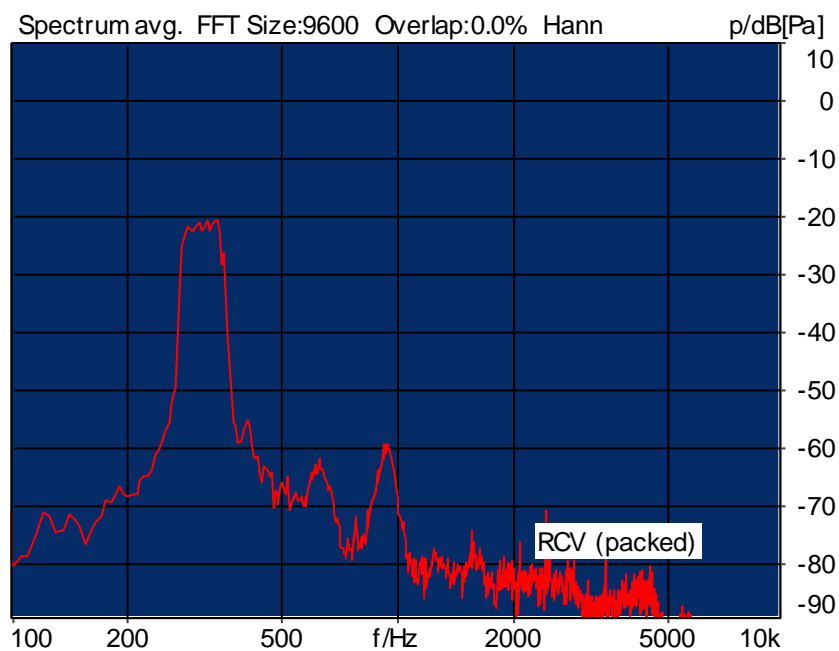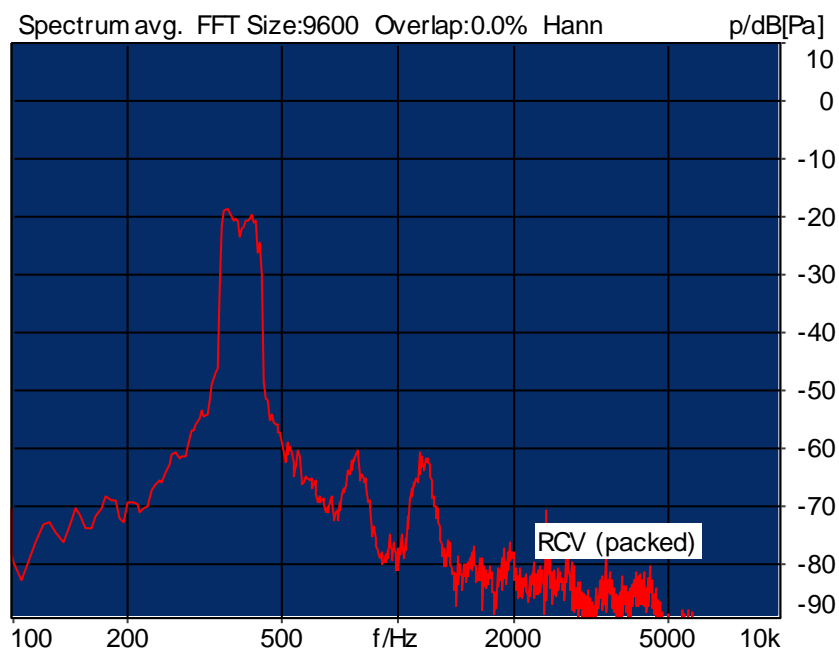

Distortion (Noise) RCV (packed): 34.95 dB (1.79%) Ok

Ok

2025-04-19 上午 08:03   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 35.70 dB (1.64%) Ok

Ok

2025-04-19 上午 08:04   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
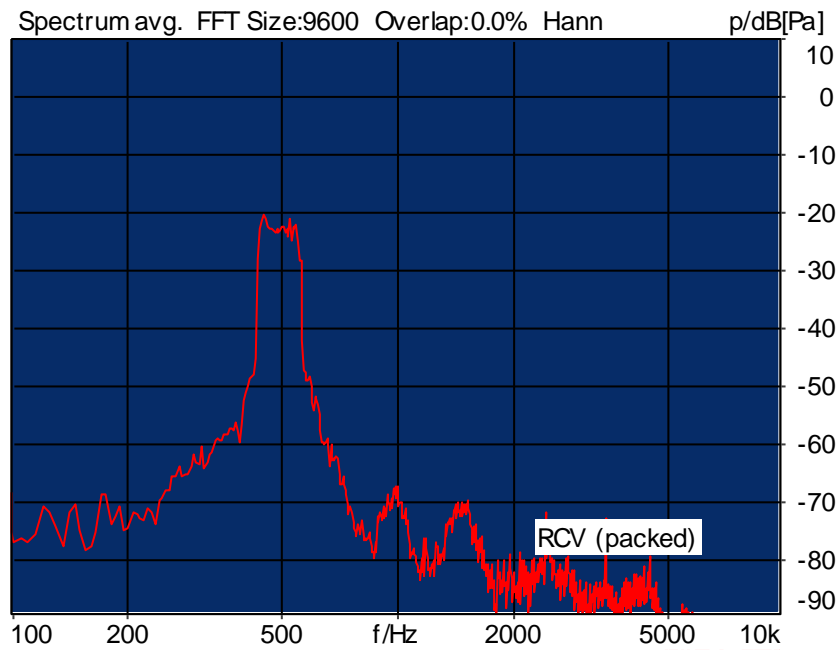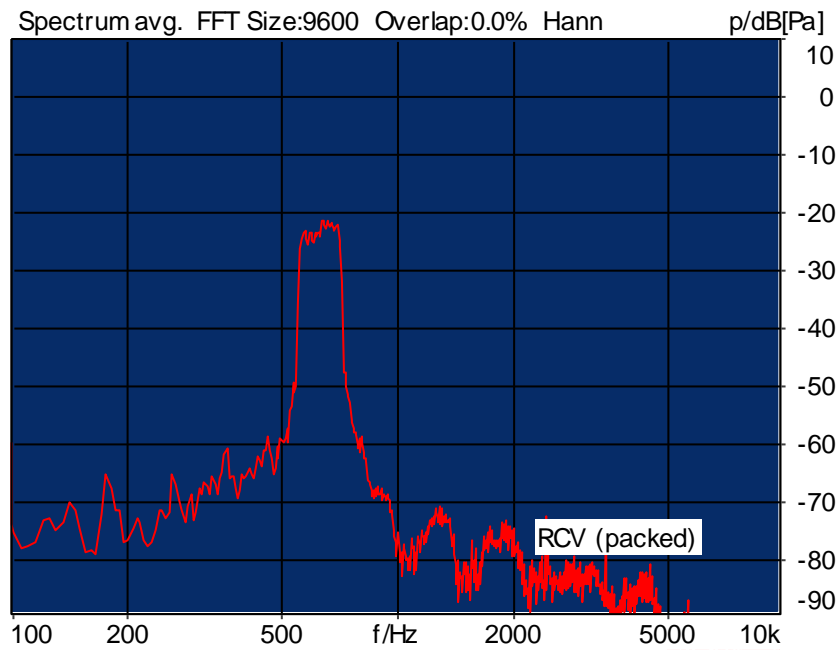

Distortion (Noise) RCV (packed): 34.27 dB (1.93%) Ok

Ok

2025-04-19 上午 08:05   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): 35.89 dB (1.60%) Ok
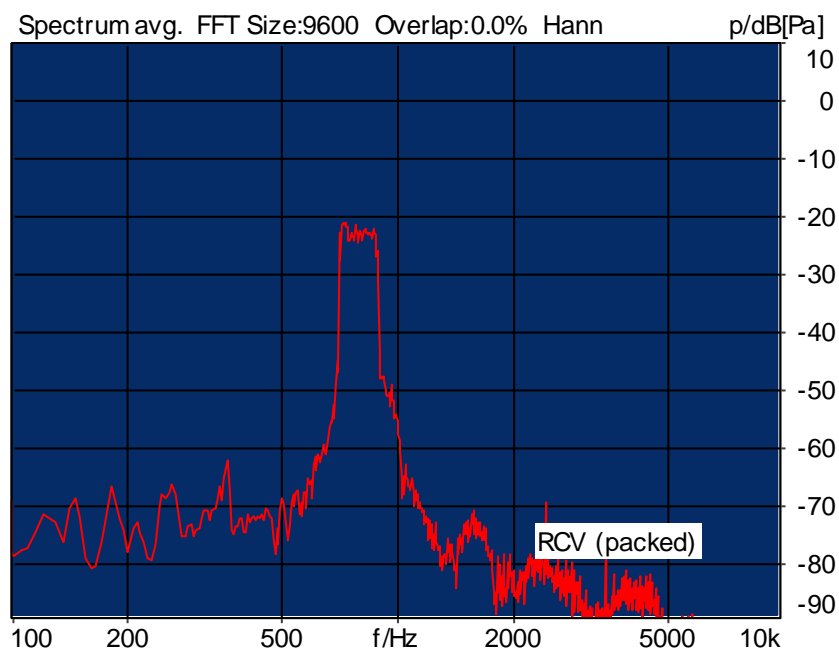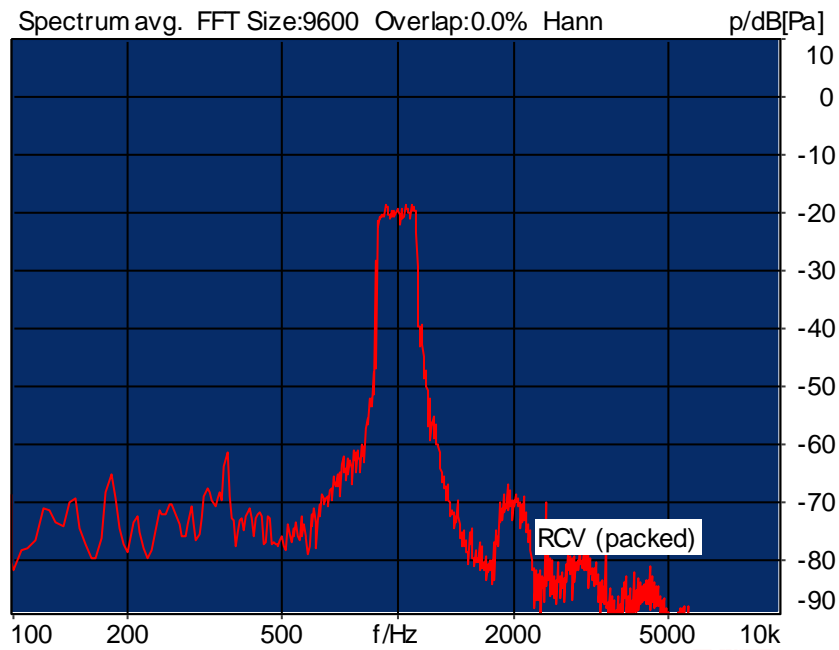
Ok

2025-04-19 上午 08:05   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 31.97 dB (2.52%) Ok

Ok

2025-04-19 上午 08:06   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 32.70 dB (2.32%) Ok
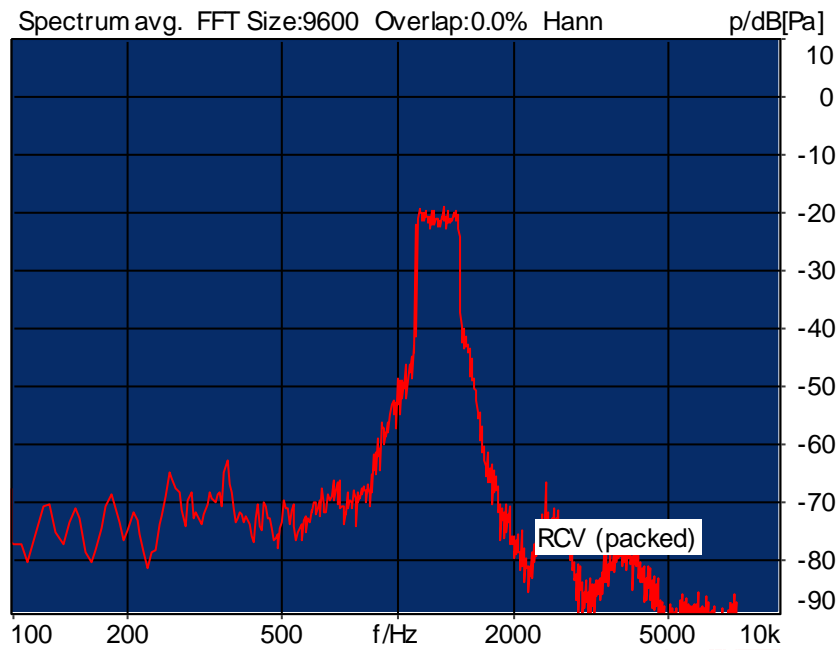
Ok

2025-04-19 上午 08:07   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 24.31 dB (6.09%) Ok

Ok
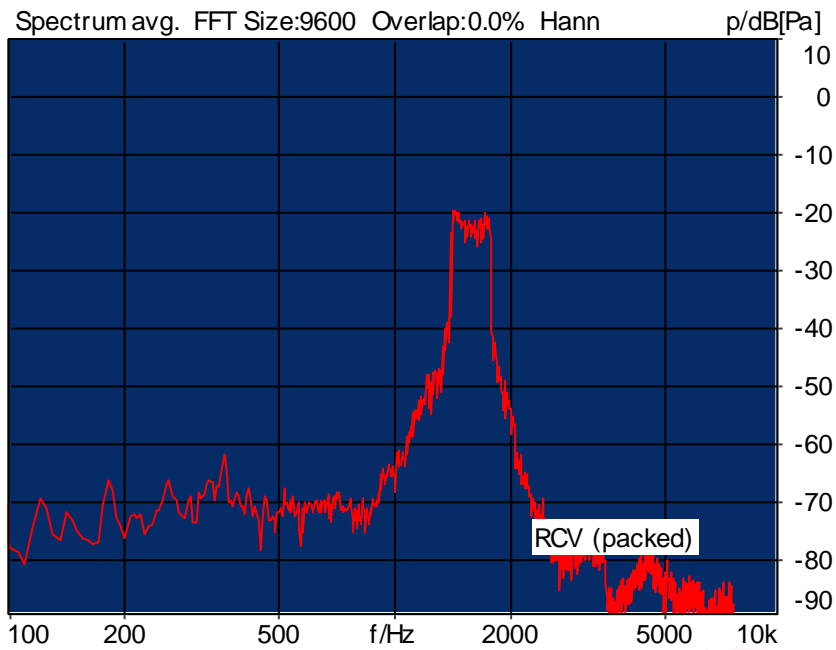
2025-04-19 上午 08:07   ACQUA 6.1.110

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 24.62 dB (5.88%) Ok

Ok

2025-04-19 上午 08:08   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
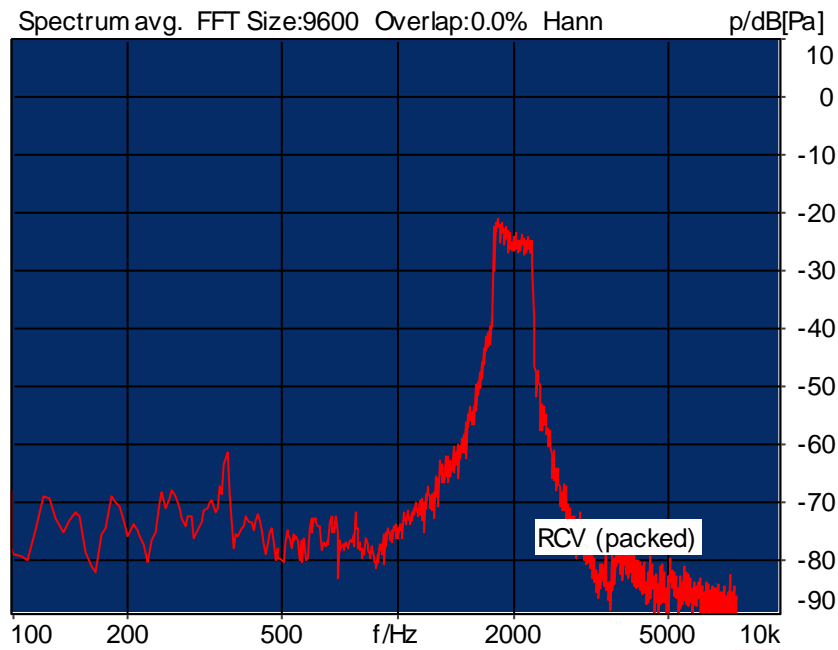

Distortion (Noise) RCV (packed): 22.83 dB (7.22%) Ok
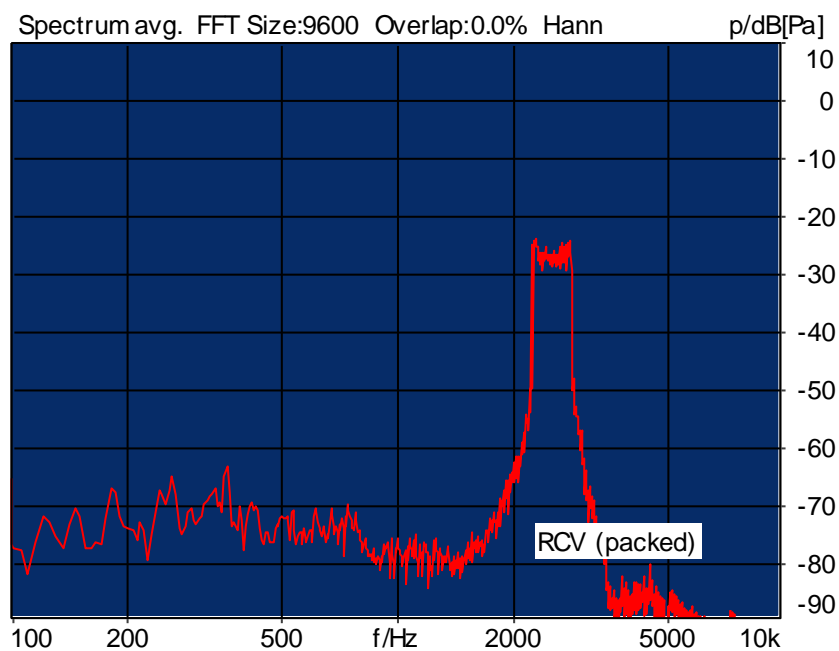
Ok

2025-04-19 上午 08:08   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

2025-04-19 上午 08:09   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
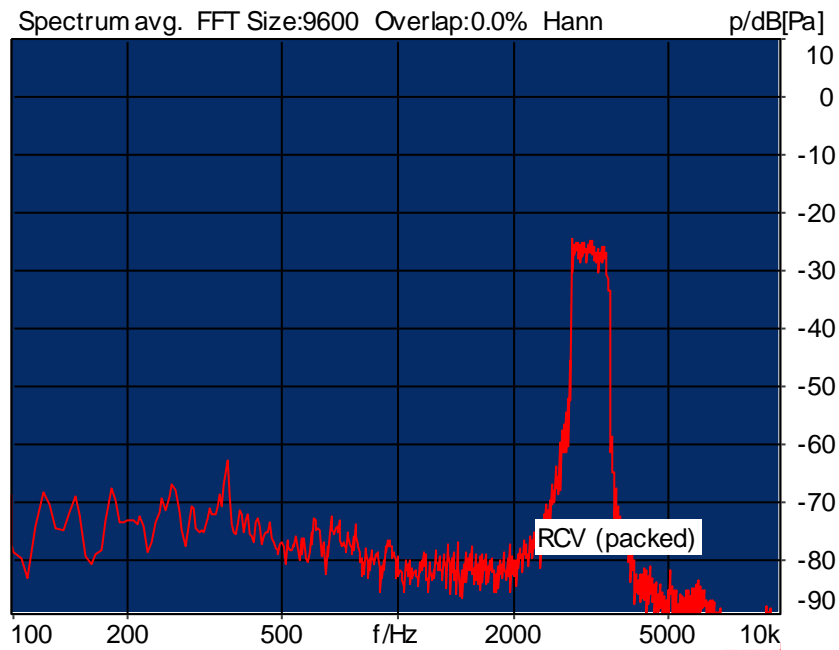

Distortion (Noise) RCV (packed): 34.80 dB (1.82%) Ok

Ok

2025-04-19 上午 08:10   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 26.78 dB (4.58%) Ok

Ok

2025-04-19 上午 08:10   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
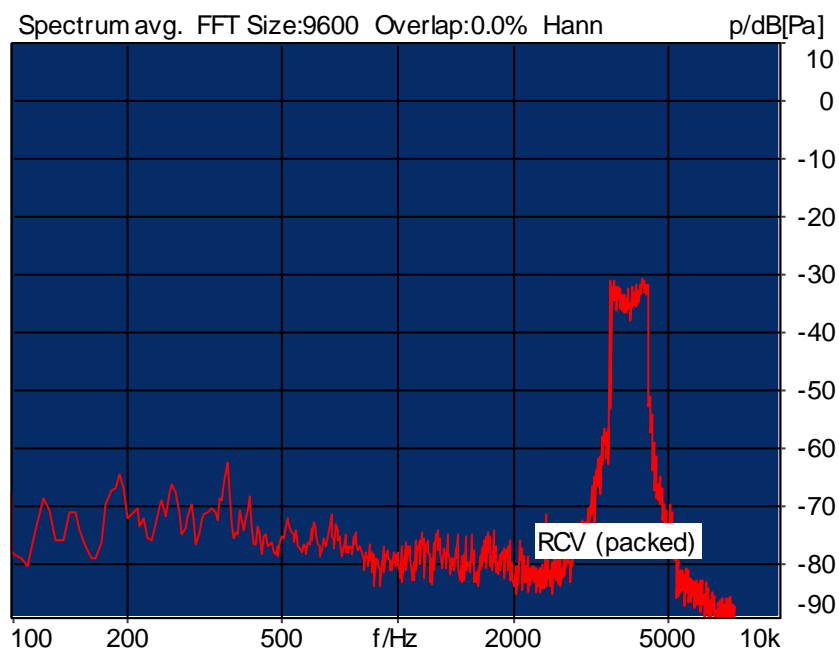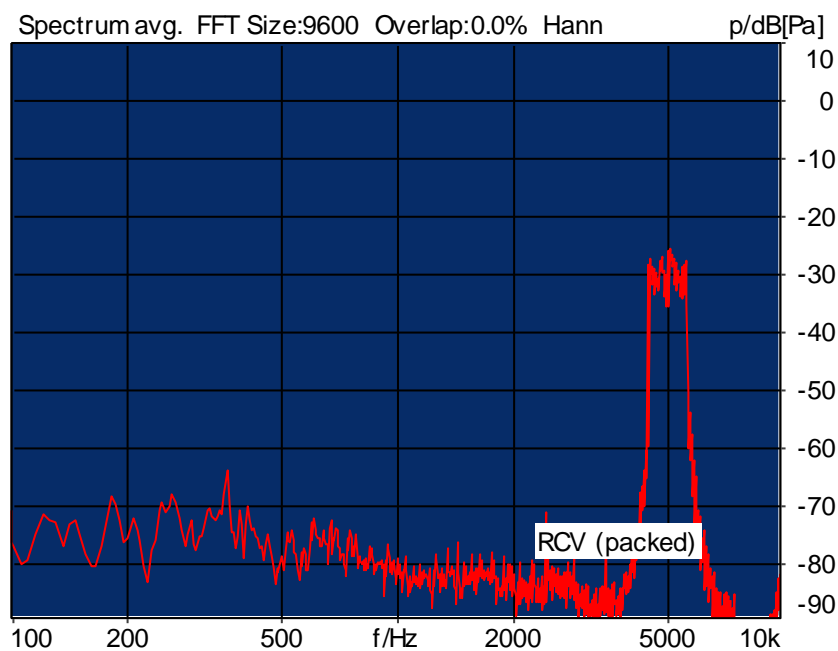

Distortion (Noise) RCV (packed): 34.61 dB (1.86%) Ok

Ok

2025-04-19 上午 08:11   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	35.06 dB
2	315Hz	34.95 dB
3	400Hz	35.70 dB
4	500Hz	34.27 dB
5	630Hz	35.89 dB
6	800Hz	31.97 dB
7	1000Hz	32.70 dB
8	1250Hz	24.31 dB
9	1600Hz	24.62 dB
10	2000Hz	22.83 dB
11	2500Hz	30.17 dB
12	3150Hz	34.80 dB
13	4000Hz	26.78 dB
14	5000Hz	34.61 dB

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

Smallest SDNR was 22.83dB at 2000Hz.

2025-04-19 上午 08:11   ACQUA

5.3 Frequency Response 8N DF

TIA-5050 (2018-01) \ Measurements \ Wideband
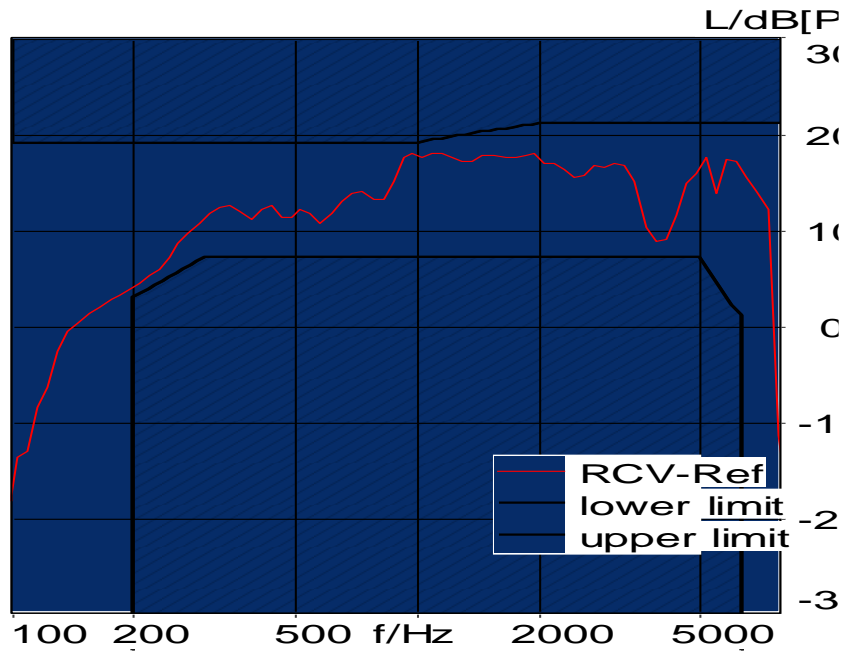
Absolute minimal distance

1.21 dB at 974.0 Hz Ok

Ok

2025-04-19 上午 08:01   ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 2N DF

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

Absolute minimal distance

1.18 dB at 974.0 Hz Ok

Ok

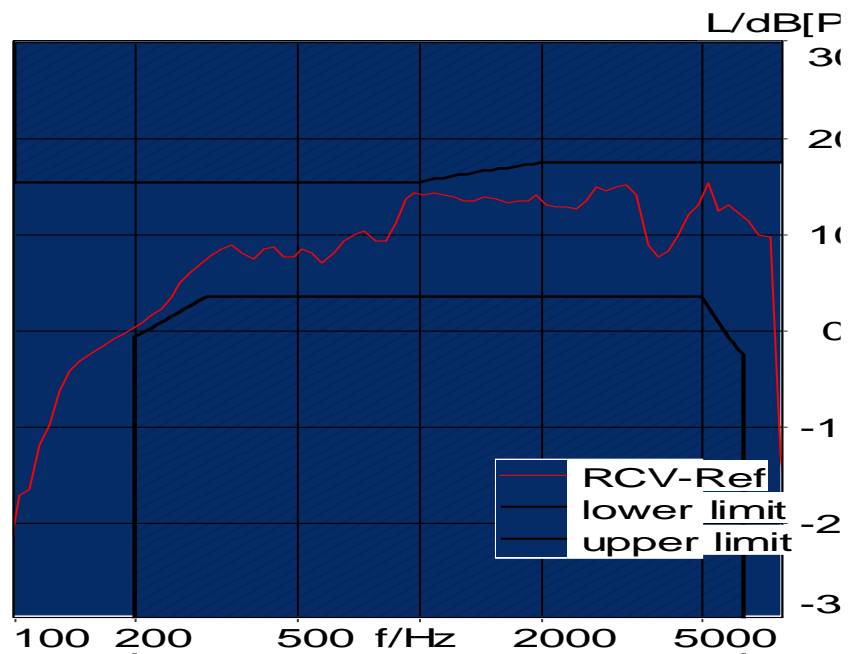2025-04-19 上午 08:12   ACQUA 6.1.110

Limits

lower
Fit into tolerance

#3 WiFi 2.4GHz EVS WB 24.4kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	232.4
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.26
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	87.93
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.50
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.67
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.16
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.24
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.76
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.17
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.69
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.05
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.46
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.68
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.65
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.63
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.95
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.49
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	22.05
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.45
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.19
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.39
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.27
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.78
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.99
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.53
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.55
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.41
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.47
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.12
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.40
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.19
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.07
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	20.55
5.3 Frequency Response 8N DF	Ok	Min. dist. to tolerance scheme [dB], 1447.5 Hz	2.18
5.3 Frequency Response 2N DF	Ok	Min. dist. to tolerance scheme [dB], 217.7 Hz	2.29

Overall Receive Delay WB

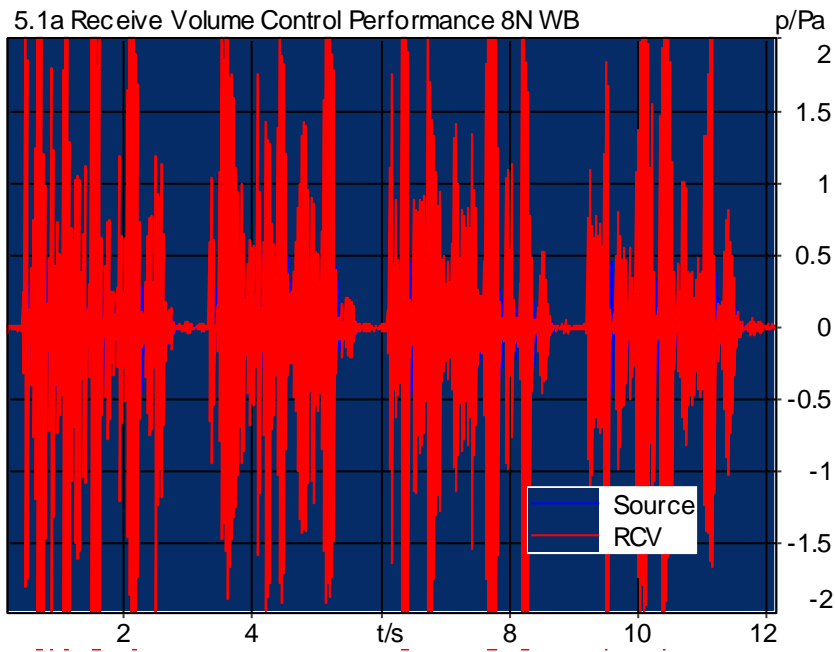TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope Ⅰ %
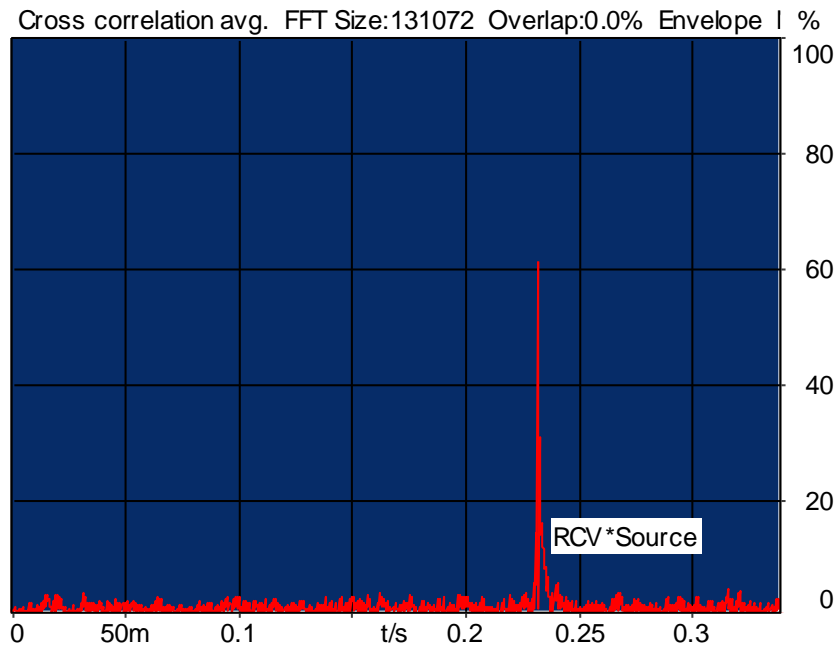
Channel	Delay	Correlation
RCV*Source	232.4 ms	61.54 %

2025-04-02 上午 11:32   ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

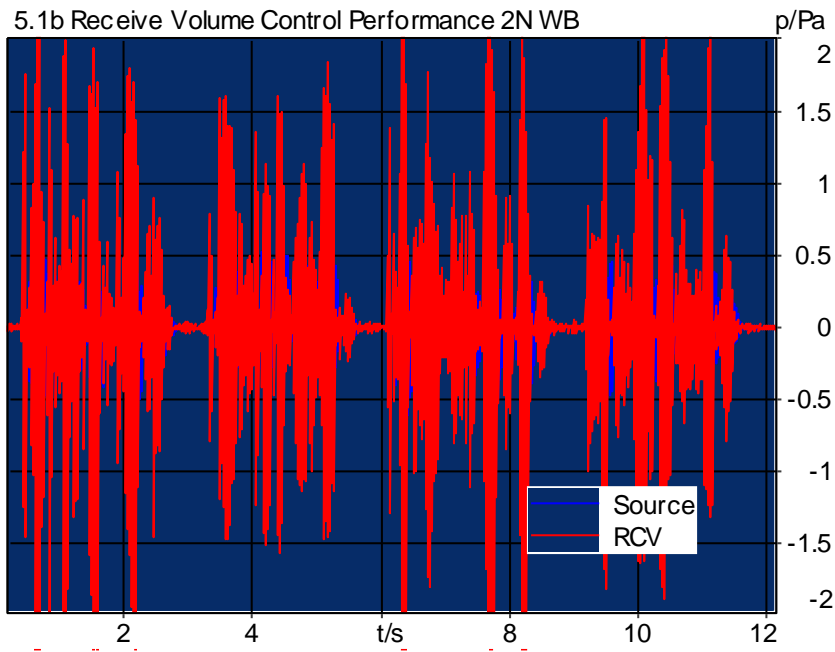| Channel	Speech level	Activity	
RCV	88.26 dB[SPL]	39.86%	Ok

Ok

2025-04-02 下午 01:49　ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB

Channel	Speech level	Activity	
RCV	87.93 dB[SPL]	27.58%	Ok

Ok

2025-04-02 下午 01:57   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
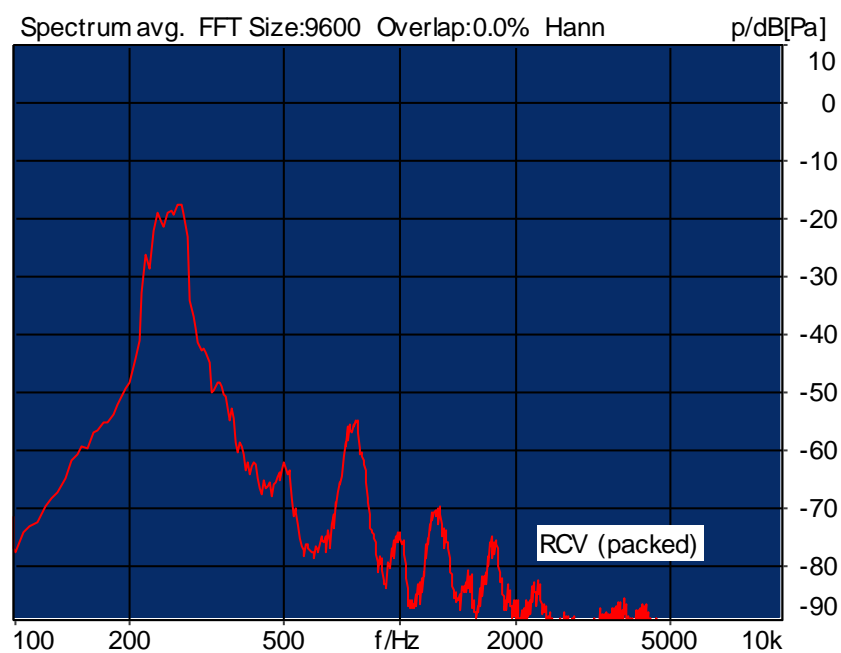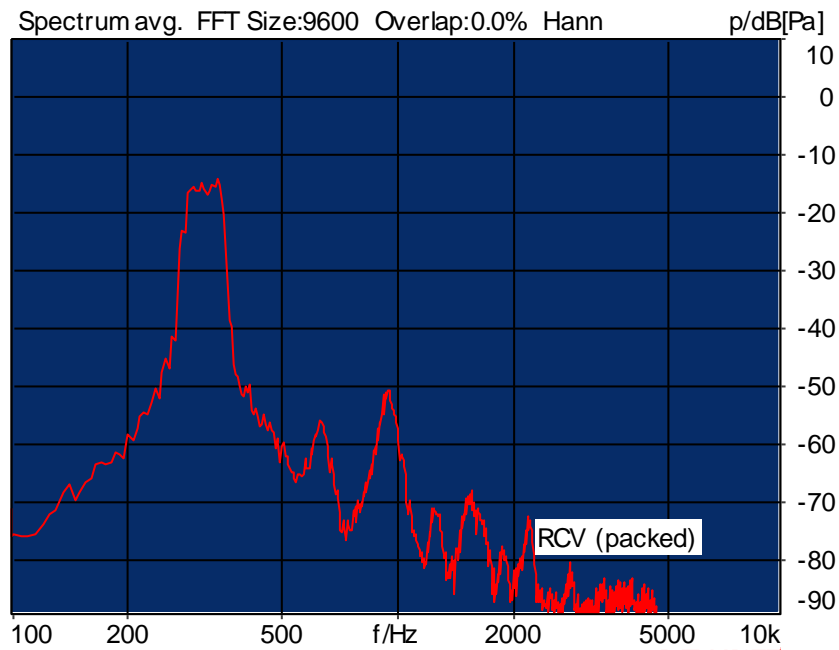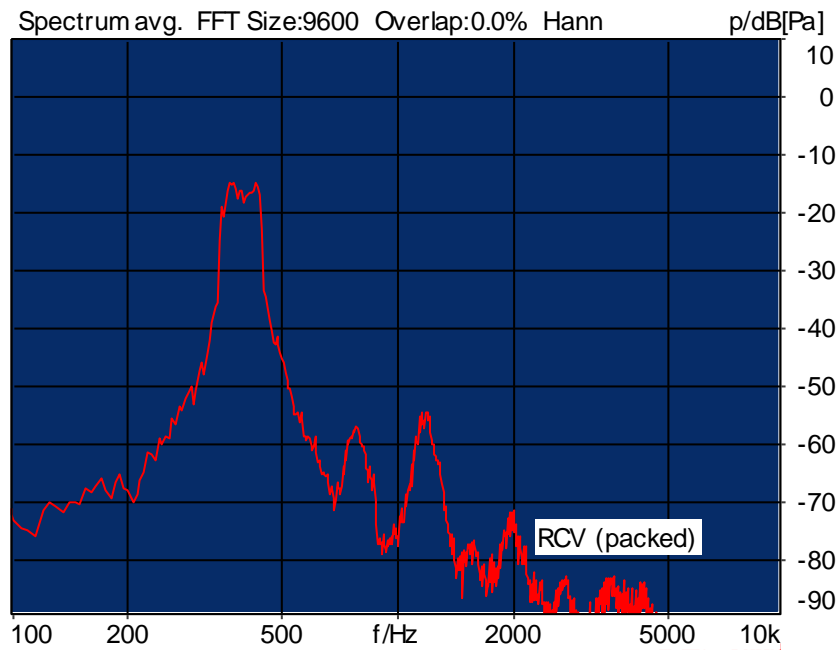

Distortion (Noise) RCV (packed): 32.50 dB (2.37%) Ok

Ok

2025-04-02 上午 11:34   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): 33.67 dB (2.07%) Ok

Ok

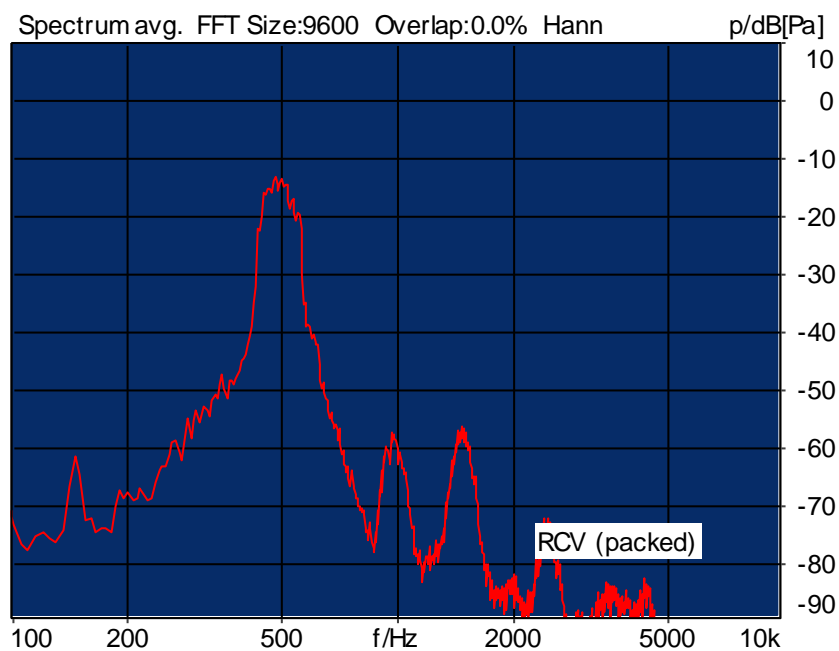2025-04-02 上午 11:34   ACQUA 6.1.110

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): 32.16 dB (2.47%) Ok
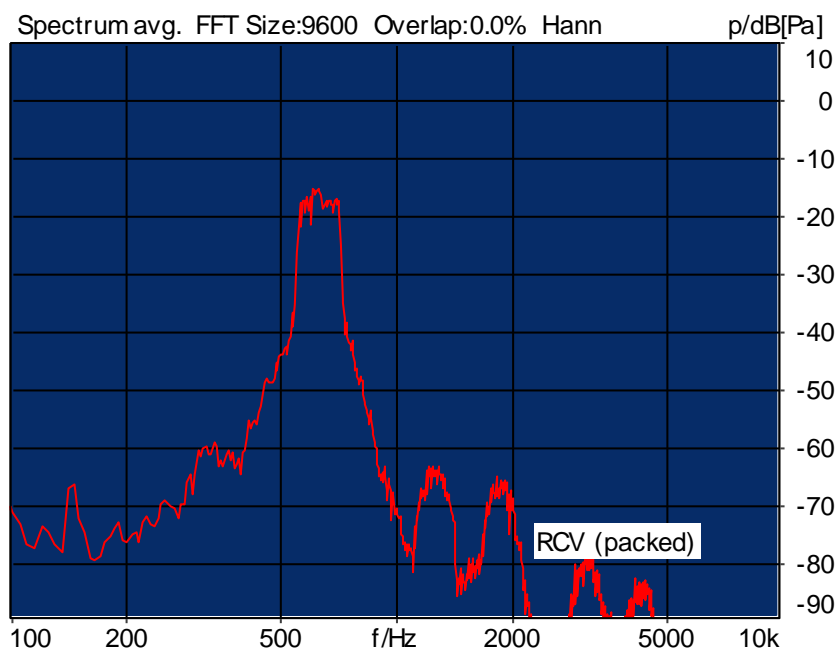
Ok

2025-04-02 上午 11:35   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 31.24 dB (2.74%) Ok

Ok

2025-04-02 上午 11:35   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
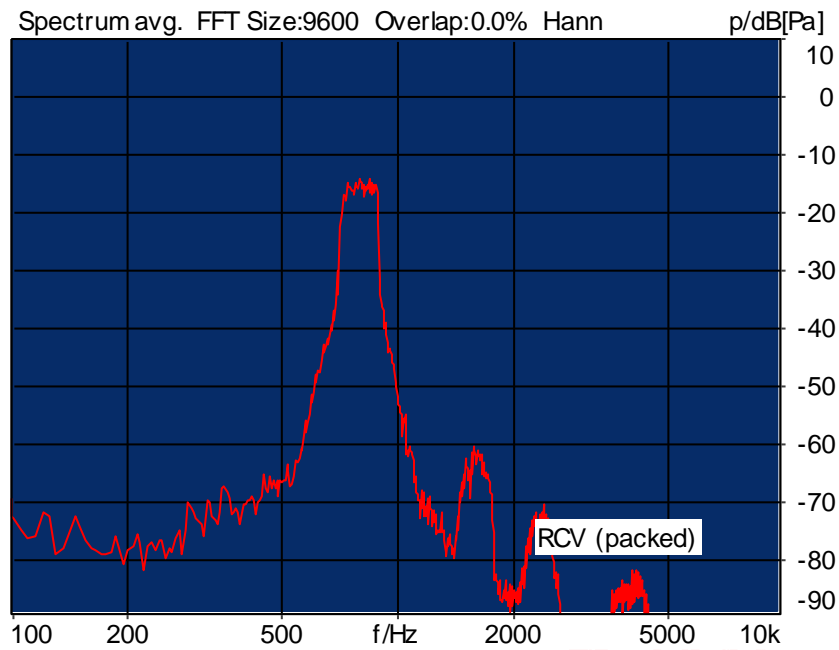

Distortion (Noise) RCV (packed): 29.76 dB (3.25%) Ok

Ok

2025-04-02 上午 11:36   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
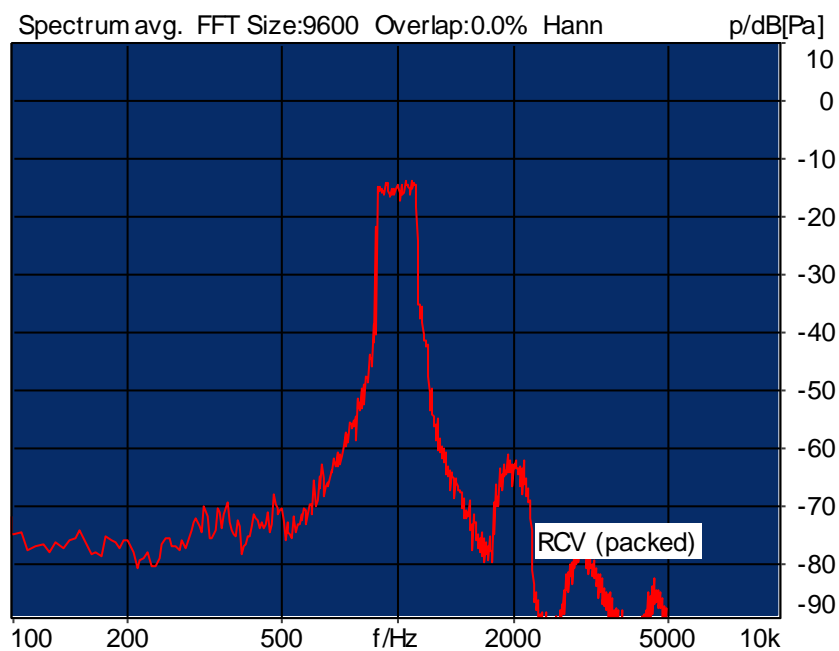

Distortion (Noise) RCV (packed): 30.17 dB (3.10%) Ok

Ok

2025-04-02 上午 11:37   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
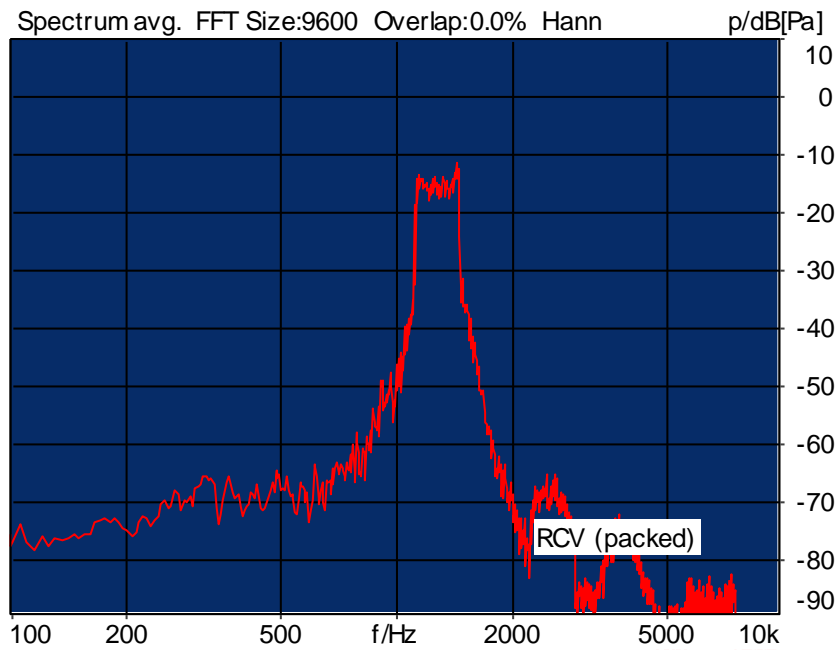

Distortion (Noise) RCV (packed): 31.69 dB (2.60%) Ok

Ok

2025-04-02 上午 11:37   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): 22.05 dB (7.89%) Ok
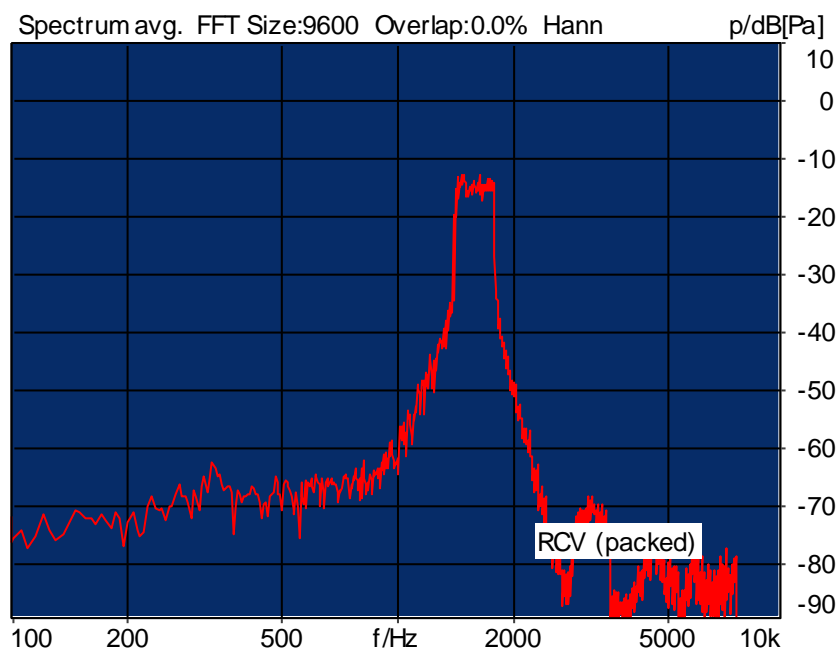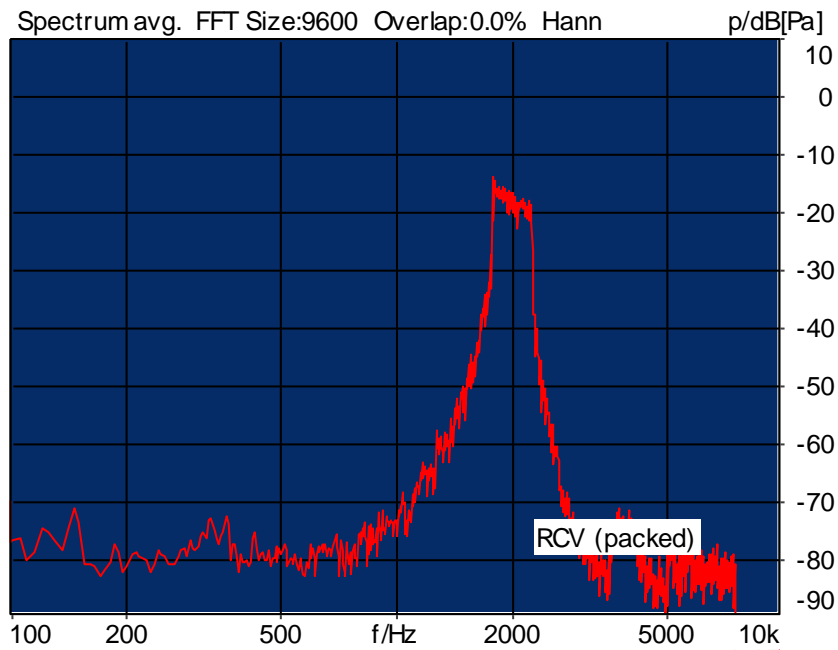
Ok

2025-04-02 上午 11:38　　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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 26.46 dB (4.76%) Ok

Ok

2025-04-02 上午 11:38   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 22.68 dB (7.34%) Ok

Ok

2025-04-02 上午 11:39   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
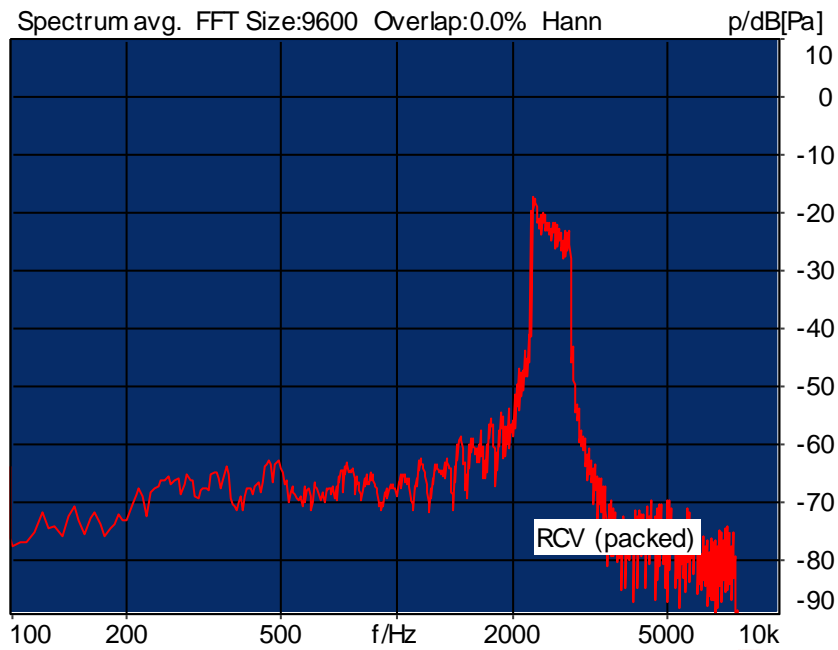

Distortion (Noise) RCV (packed): 27.65 dB (4.15%) Ok

Ok

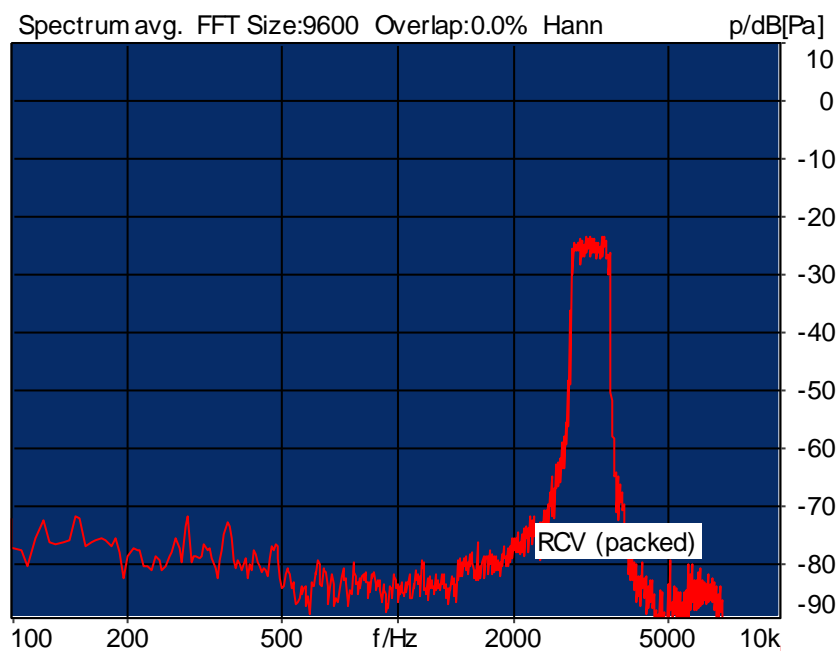2025-04-02 上午 11:40   ACQUA 6.1.110

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 34.63 dB (1.86%) Ok

Ok

2025-04-02 上午 11:40   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

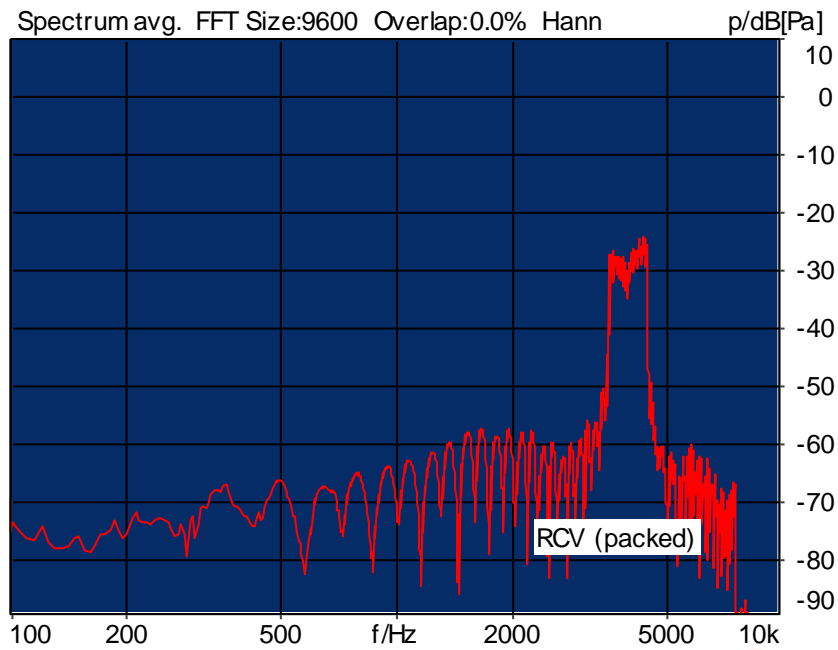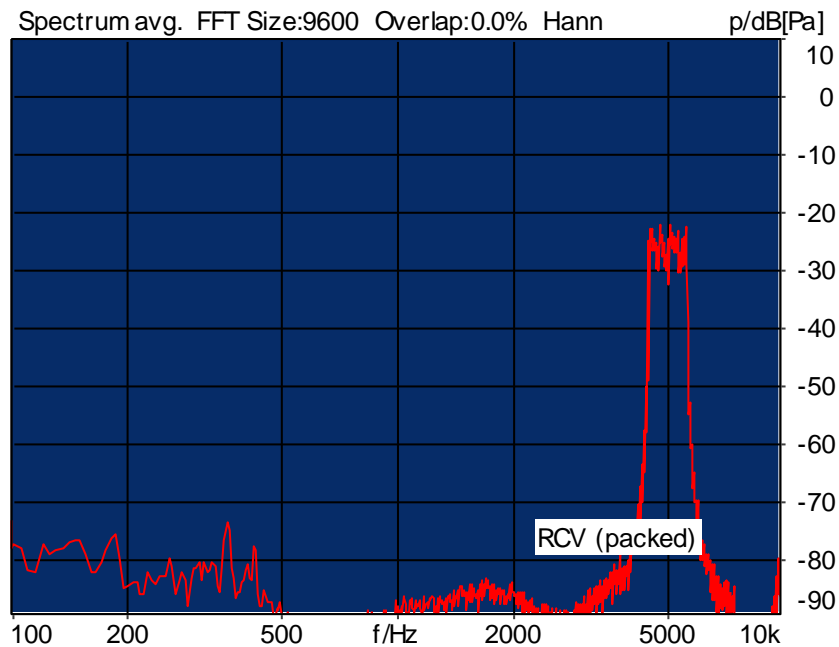Distortion (Noise) RCV (packed): 24.95 dB (5.65%) Ok

Ok

2025-04-02 上午 11:41   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

Spectrum avg.　FFT Size:9600　Overlap:0.0%　Hann　　　　　p/dB[Pa]

Distortion (Noise) RCV (packed): 36.49 dB (1.50%) Ok

Ok

2025-04-02 上午 11:41　　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	32.50 dB
2	315Hz	33.67 dB
3	400Hz	32.16 dB
4	500Hz	31.24 dB
5	630Hz	29.76 dB
6	800Hz	30.17 dB
7	1000Hz	31.69 dB
8	1250Hz	22.05 dB
9	1600Hz	26.46 dB
10	2000Hz	22.68 dB
11	2500Hz	27.65 dB
12	3150Hz	34.63 dB
13	4000Hz	24.95 dB
14	5000Hz	36.49 dB

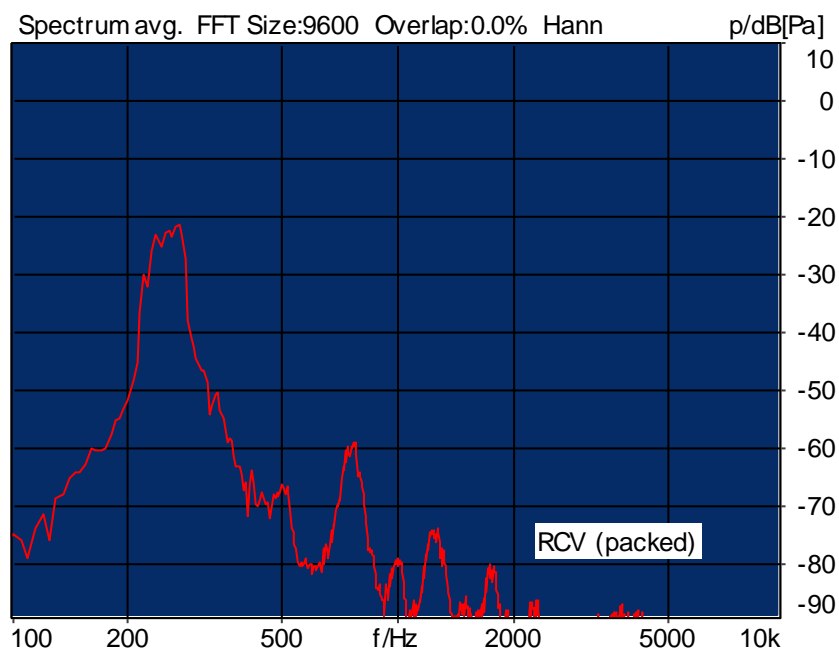All SDNRs were greater than 20.0 dB, requirement was met.

Smallest SDNR was 22.05dB at 1250Hz.

2025-04-02 上午 11:41   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann　　　　p/dB[Pa]

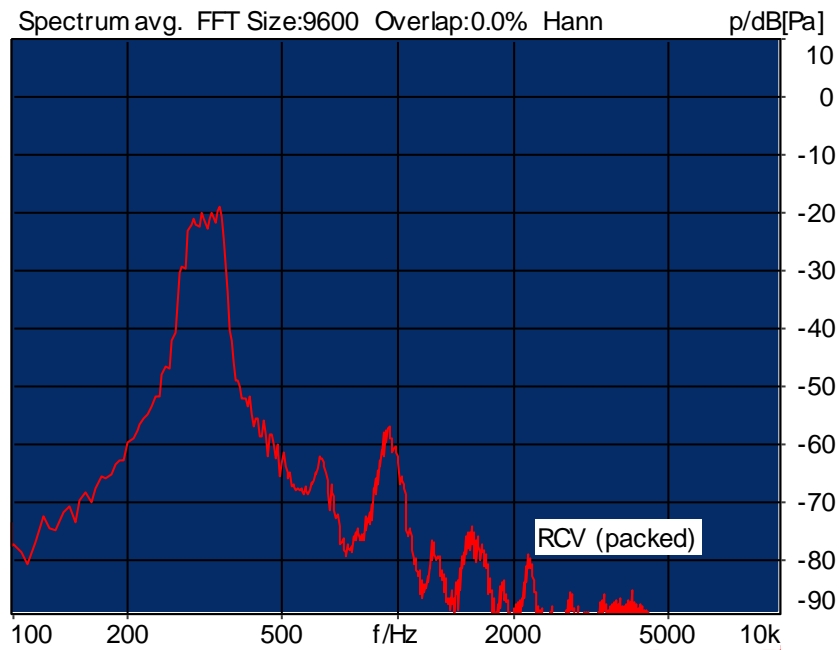Distortion (Noise) RCV (packed): 32.45 dB (2.39%) Ok

Ok

2025-04-02 上午 11:43　　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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann

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

Ok

2025-04-02 上午 11:44   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
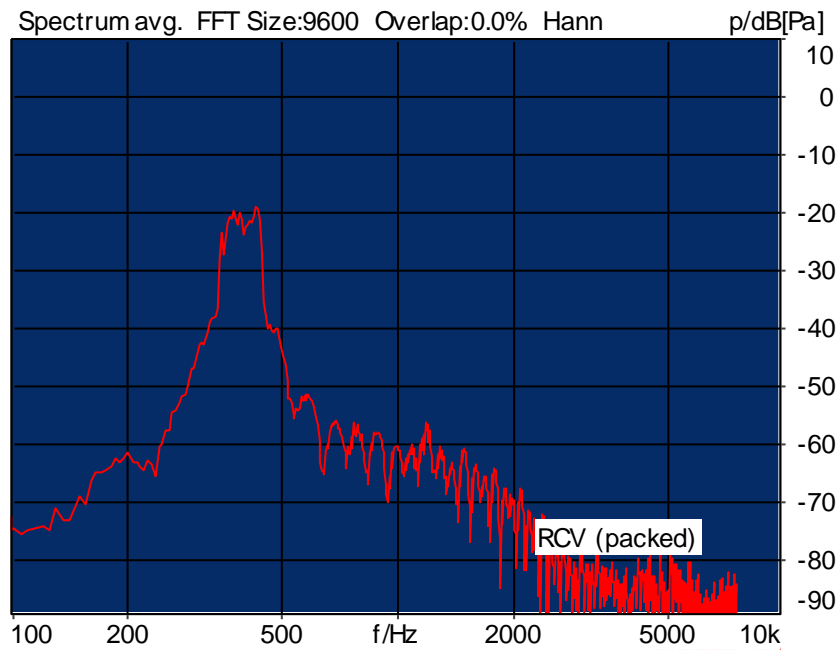

Distortion (Noise) RCV (packed): 25.39 dB (5.38%) Ok
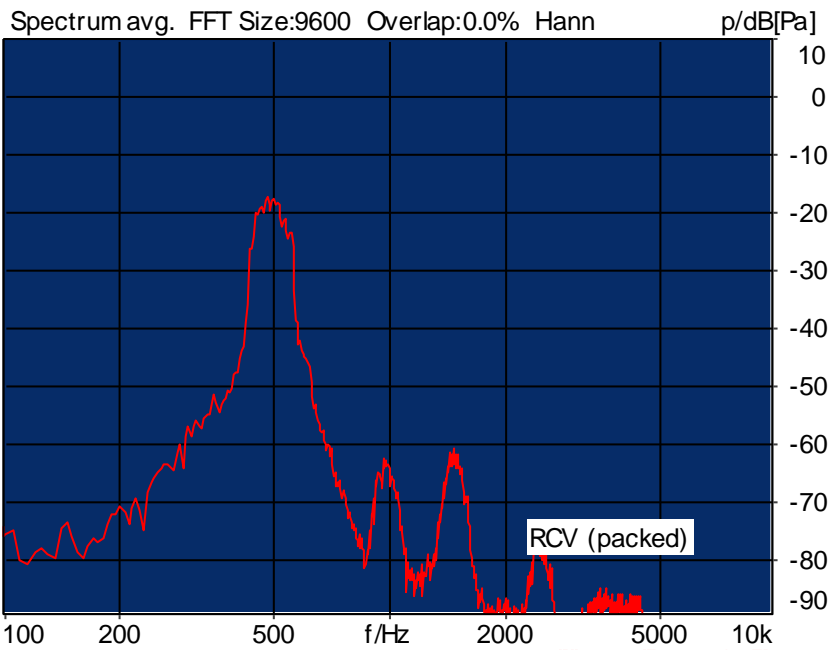
Ok

2025-04-02 上午 11:45   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): 31.27 dB (2.73%) Ok
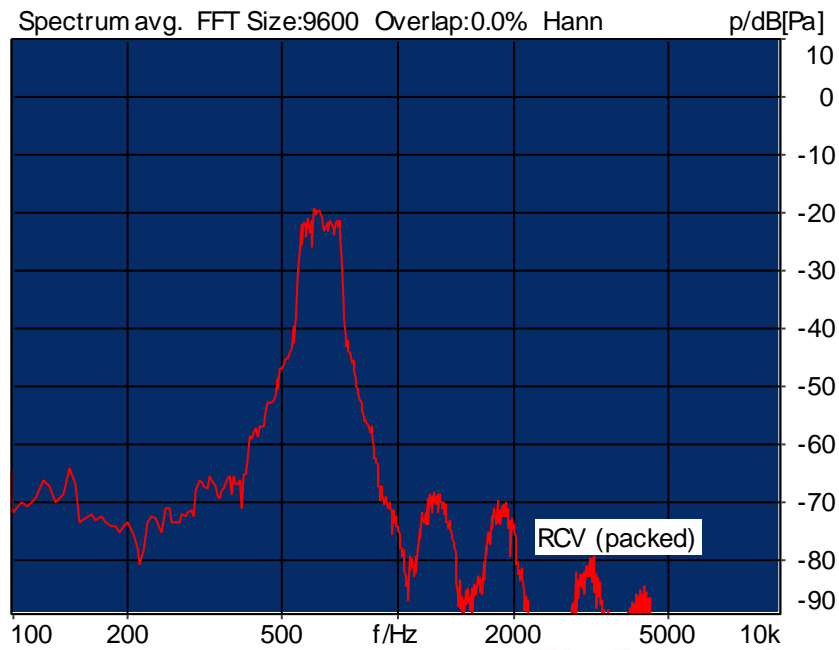
Ok

2025-04-02 上午 11:45   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): 28.78 dB (3.64%) Ok

Ok

2025-04-02 下午 12:00   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

2025-04-02 上午 11:46   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
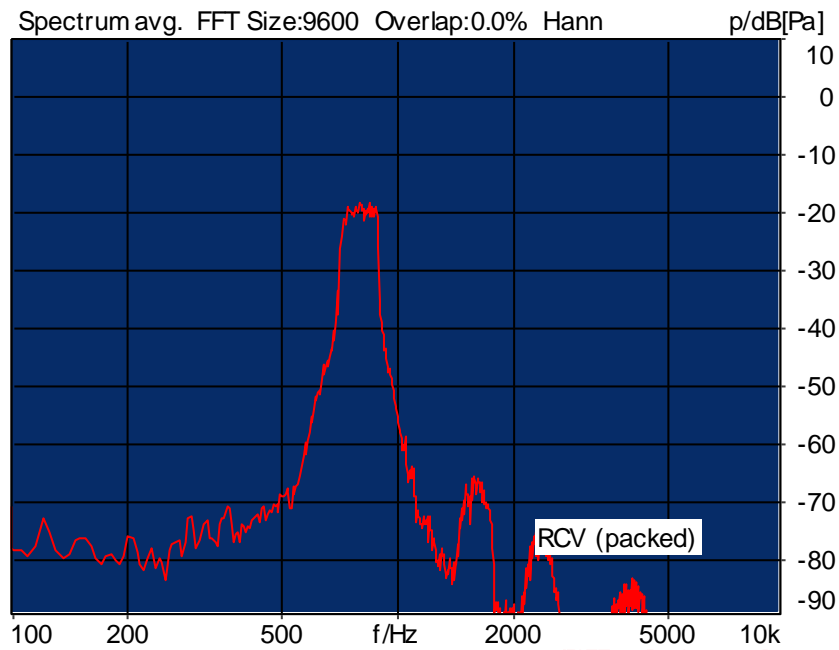

Distortion (Noise) RCV (packed): 22.53 dB (7.47%) Ok

Ok

2025-04-02 上午 11:47   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
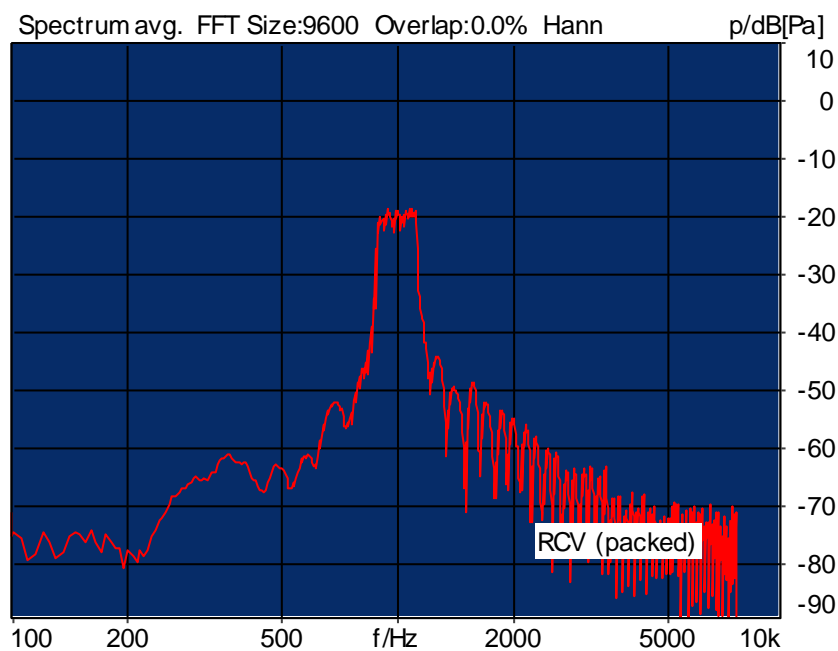

Distortion (Noise) RCV (packed): 20.55 dB (9.38%) Ok

Ok

2025-04-02 下午 12:01   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
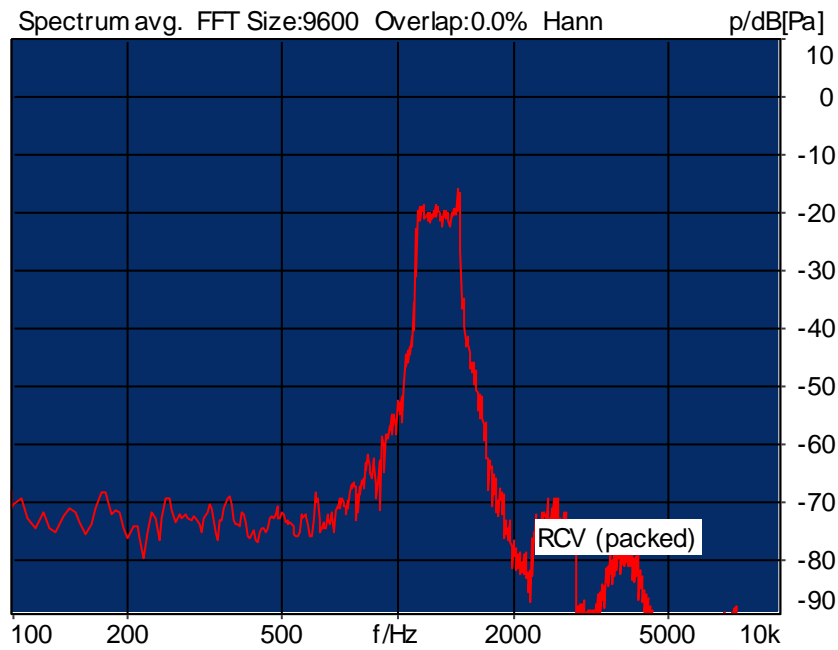

Distortion (Noise) RCV (packed): 26.41 dB (4.78%) Ok
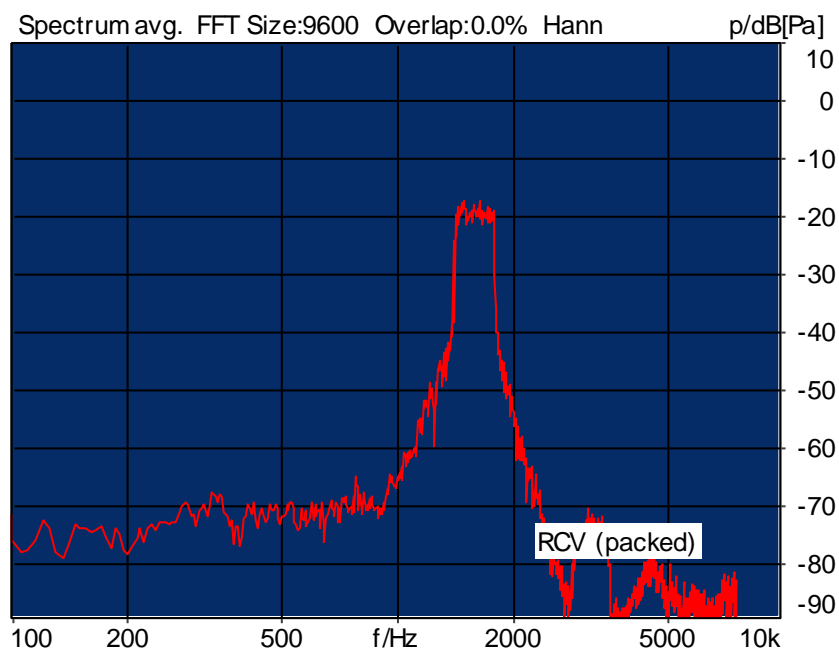
Ok

2025-04-02 下午 12:01   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 22.47 dB (7.53%) Ok

Ok

2025-04-02 上午 11:49   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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

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

Ok

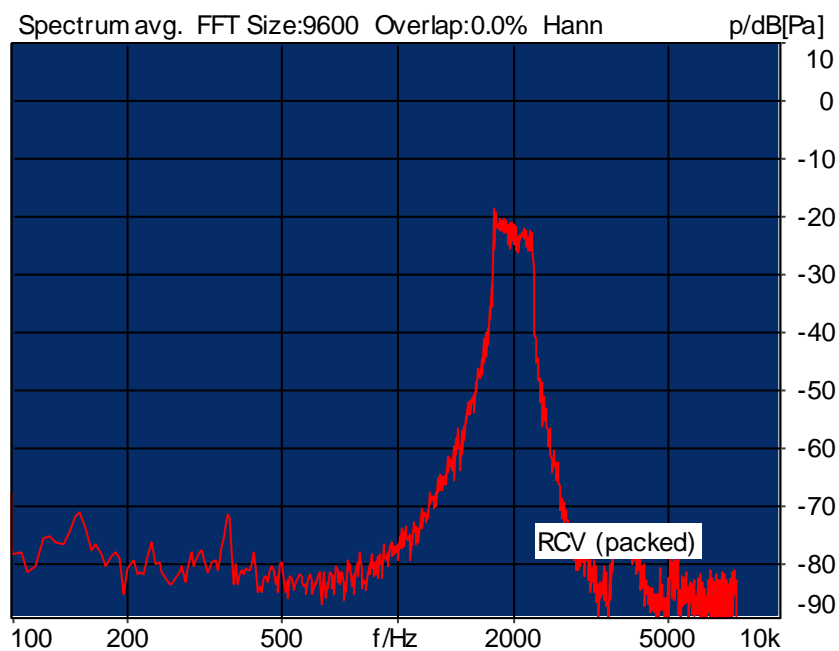2025-04-02 上午 11:49   ACQUA 6.1.110

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 34.40 dB (1.90%) Ok

Ok

2025-04-02 上午 11:50   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): 32.19 dB (2.46%) Ok
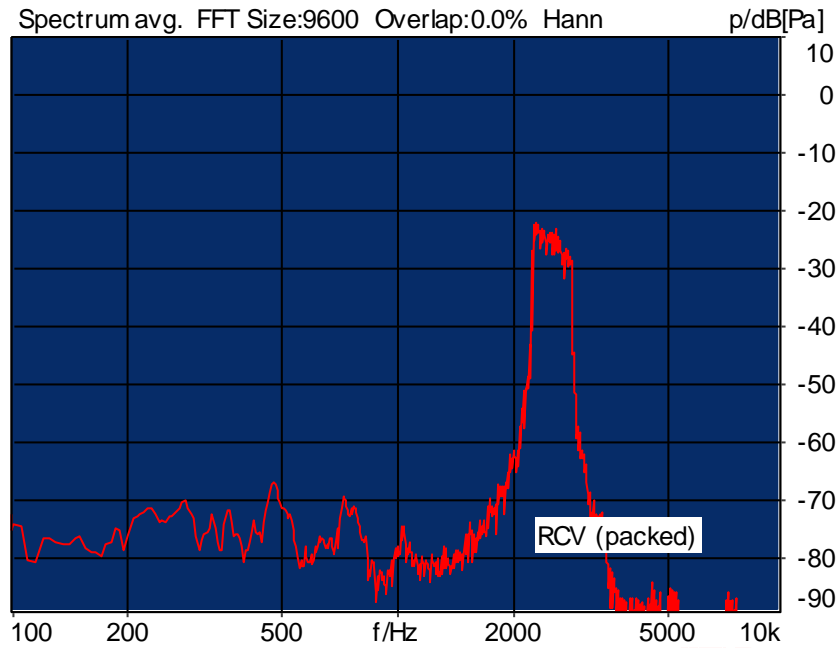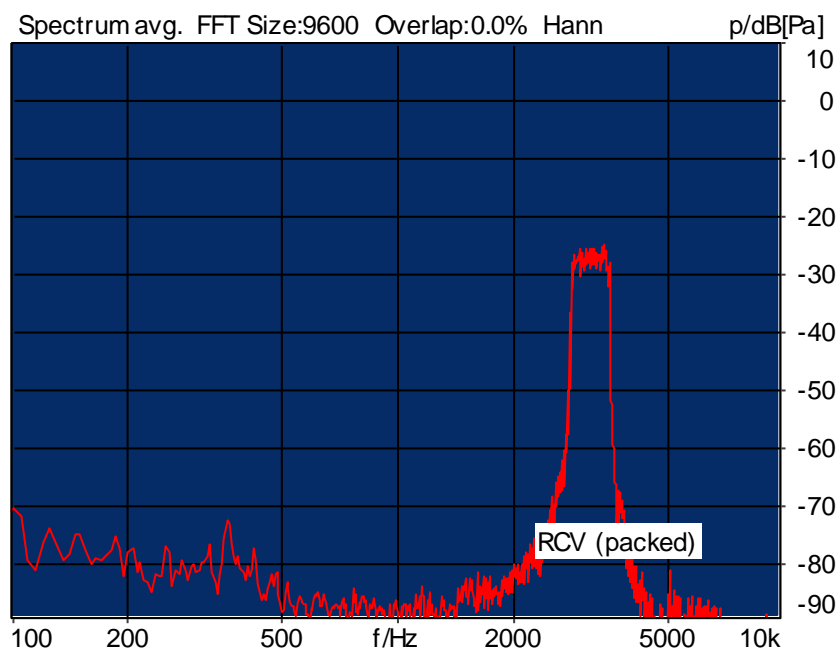
Ok

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Limits

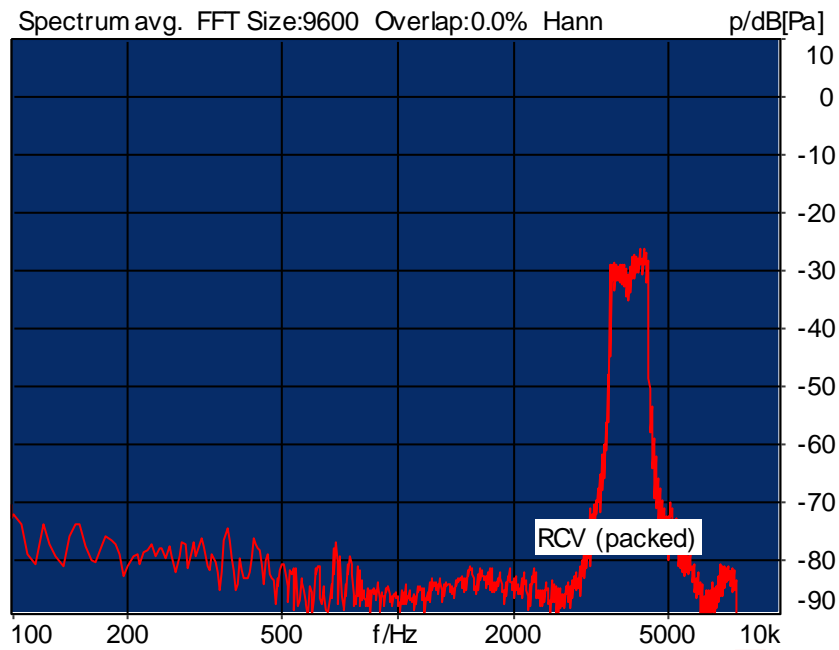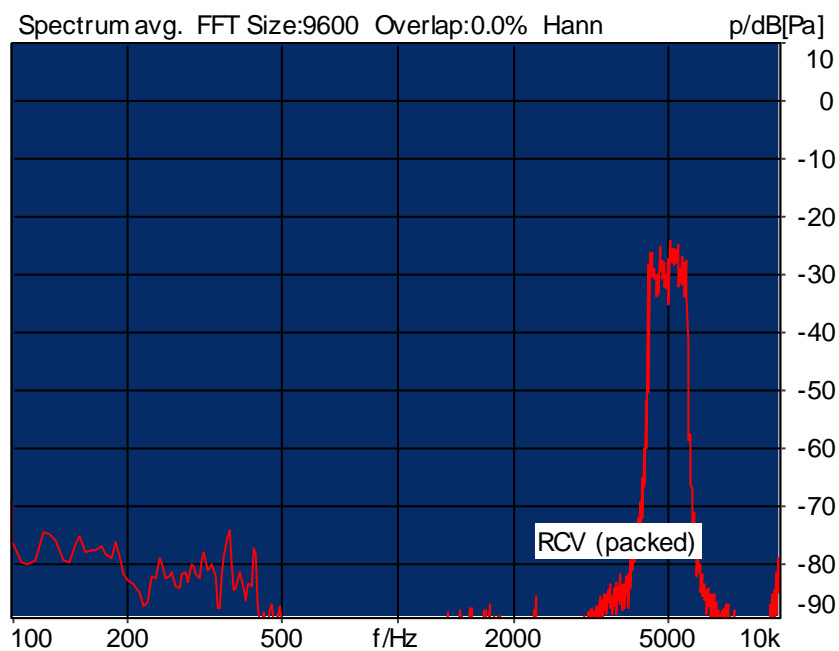| lower |
|-------|
| 20.00 dB |

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

Spectrum avg. FFT Size:9600 Overlap:0.0% Hann   p/dB[Pa]

Distortion (Noise) RCV (packed): 37.07 dB (1.40%) Ok

Ok

2025-04-02 上午 11:51   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	32.45 dB
2	315Hz	33.19 dB
3	400Hz	25.39 dB
4	500Hz	31.27 dB
5	800Hz	29.99 dB
6	1000Hz	22.53 dB
7	2000Hz	22.47 dB
8	2500Hz	29.12 dB
9	3150Hz	34.40 dB
10	4000Hz	32.19 dB
11	5000Hz	37.07 dB
12	630Hz	28.78 dB
13	1250Hz	20.55 dB
14	1600Hz	26.41 dB

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

Smallest SDNR was 20.55dB at 1250Hz.

2025-04-02 下午 01:38   ACQUA

5.3 Frequency Response 8N DF

TIA-5050 (2018-01) \ Measurements \ Wideband
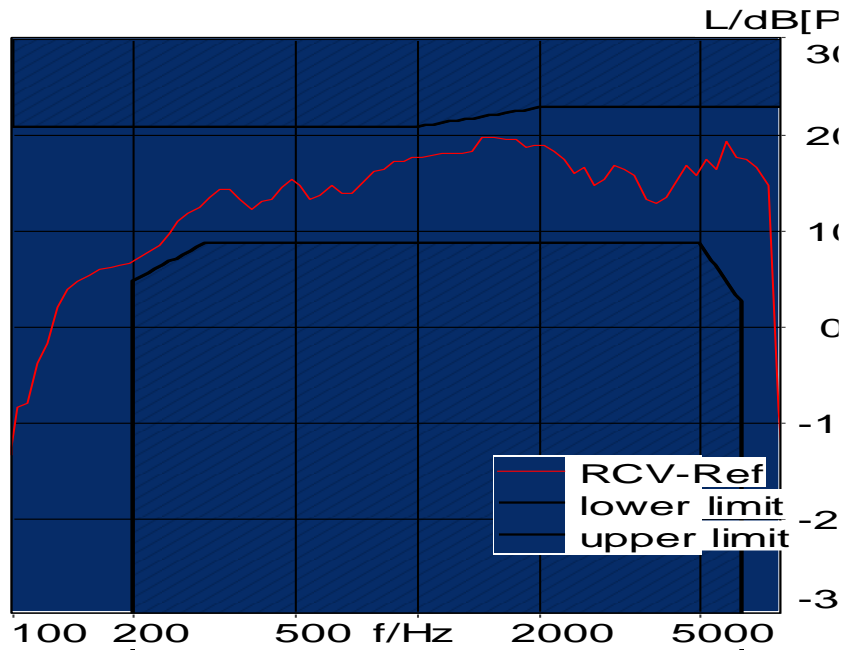
Absolute minimal distance

2.18 dB at 1447.5 Hz Ok

Ok

2025-04-02 上午 11:42　ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 2N DF

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

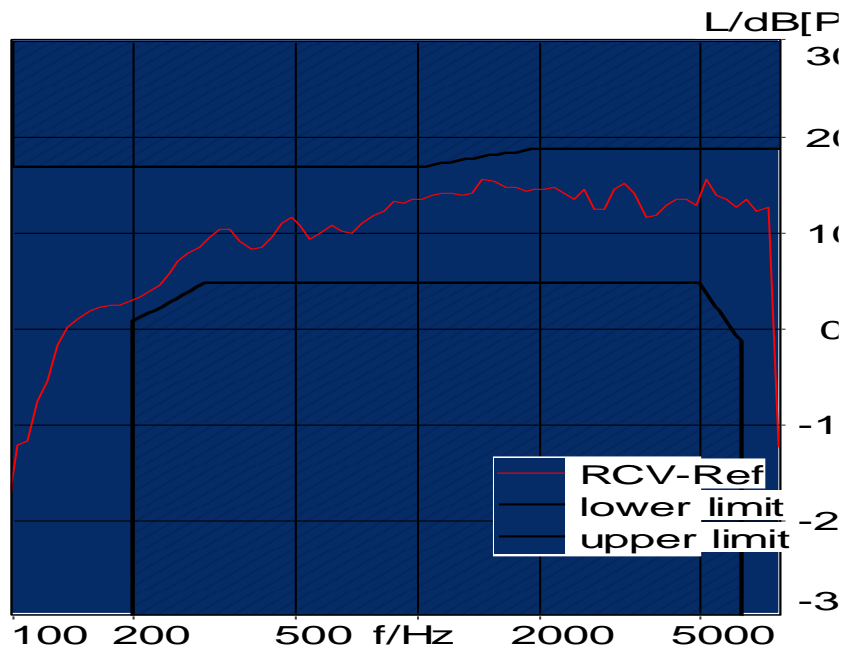

Absolute minimal distance

2.29 dB at 217.7 Hz Ok

Ok

2025-04-02 上午 11:55　ACQUA 6.1.110

Limits

lower
Fit into tolerance

Appendix A.   Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.b>

#4 GSM850 EFR NB 12.2kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	220.4
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	89.23
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	88.11

Overall Receive Delay NB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope I %
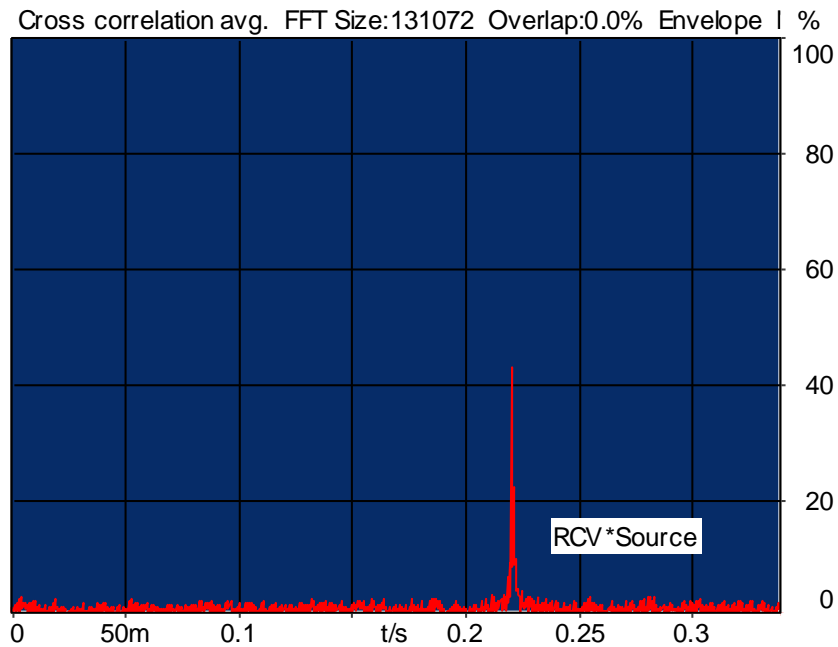
Channel	Delay	Correlation
RCV*Source	220.4 ms	43.04 %

2025-04-18 下午 10:02   ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N NB

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

5.1a Receive Volume Control Performance 8N NB

Channel	Speech level	Activity	
RCV	89.23 dB[SPL]	43.11%	Ok

Ok

2025-04-18 下午 10:11   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N NB

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

5.1b Receive Volume Control Performance 2N NB
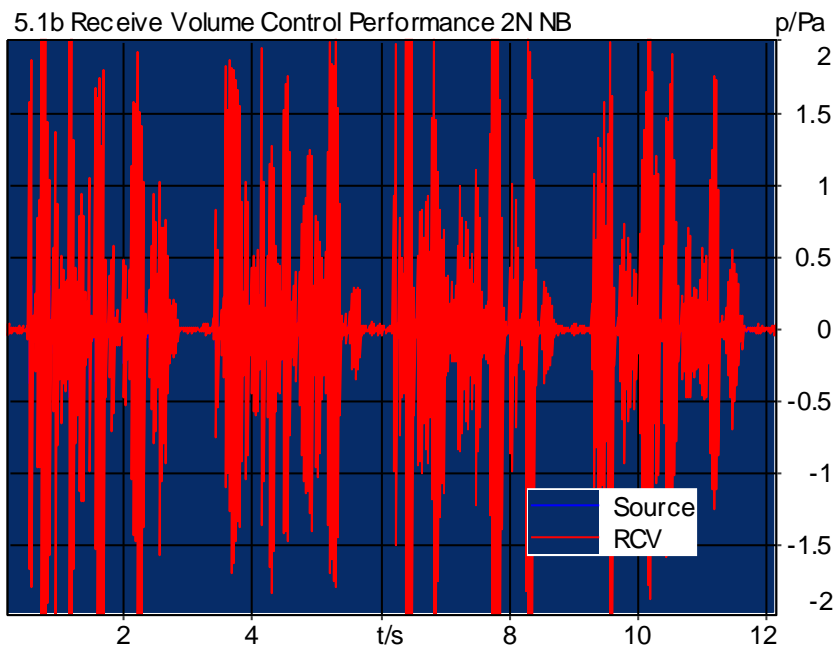
Channel	Speech level	Activity	
RCV	88.11 dB[SPL]	29.67%	Ok

Ok

2025-04-18 下午 10:05   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

#5 WCDMA II AMR WB 6.6kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	200.6
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.17
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	88.99

Overall Receive Delay WB

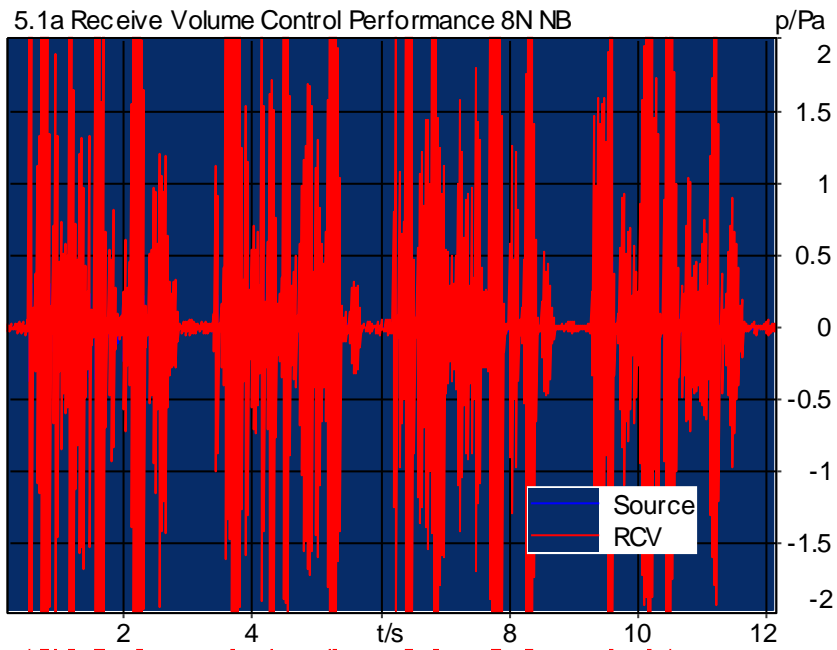TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope I %
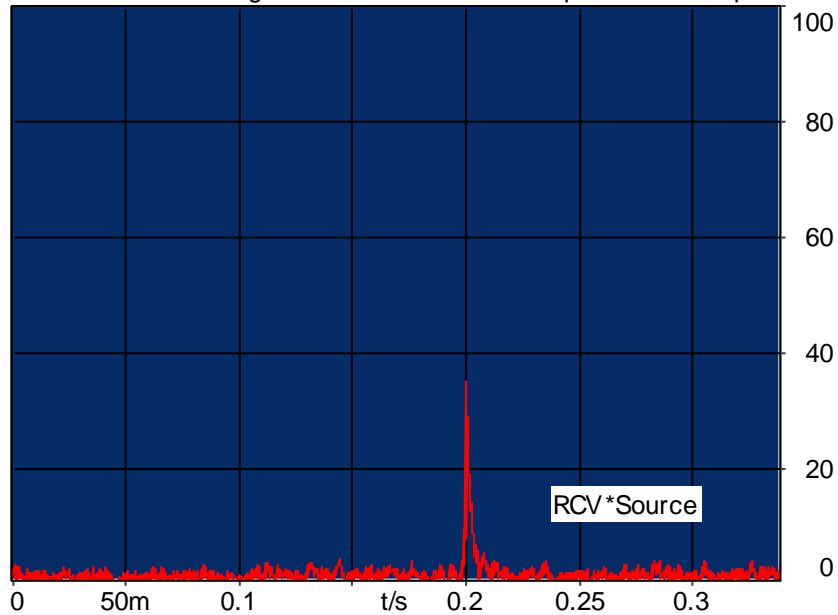
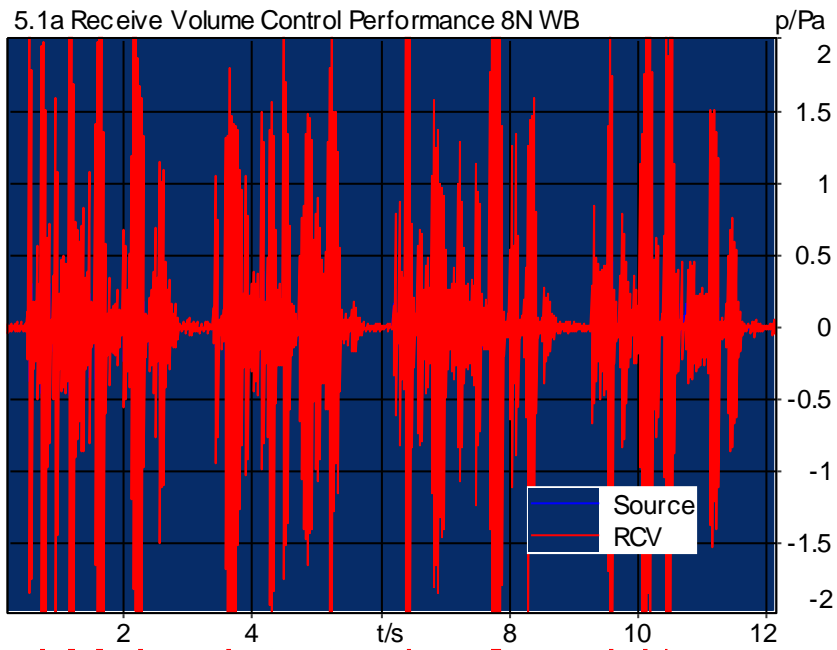| Channel	Delay	Correlation
RCV*Source	200.6 ms	35.24 %

2025-04-02 上午 08:12   ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

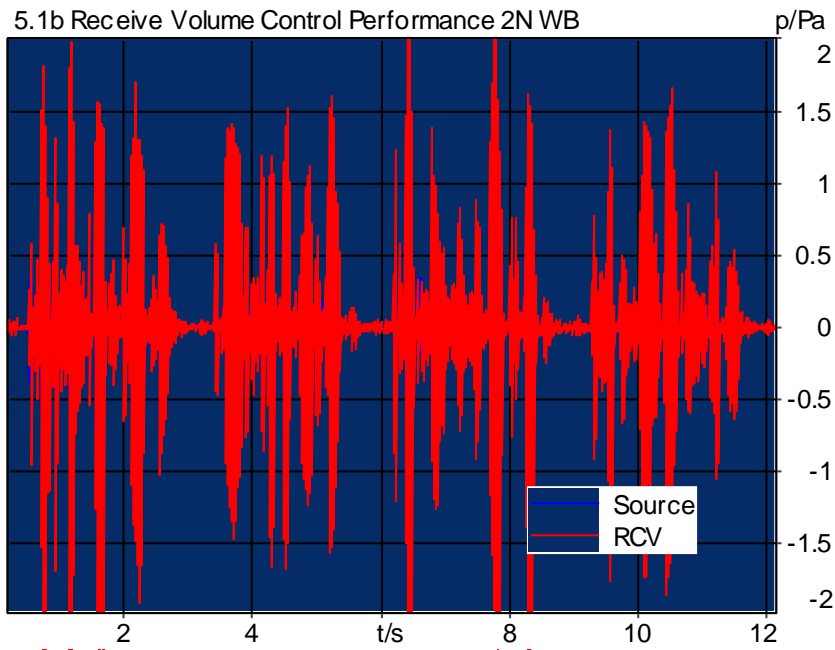| Channel	Speech level	Activity	
RCV	88.17 dB[SPL]	34.48%	Ok

Ok

2025-04-02 上午 08:18   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB   p/Pa

Channel	Speech level	Activity	
RCV	88.99 dB[SPL]	15.87%	Ok

Ok

2025-04-02 上午 08:15   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

#6 LTE Band 26 EVS WB 5.9kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	165.8
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.15
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	87.19

Overall Receive Delay WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ Preparation - Delay measurement
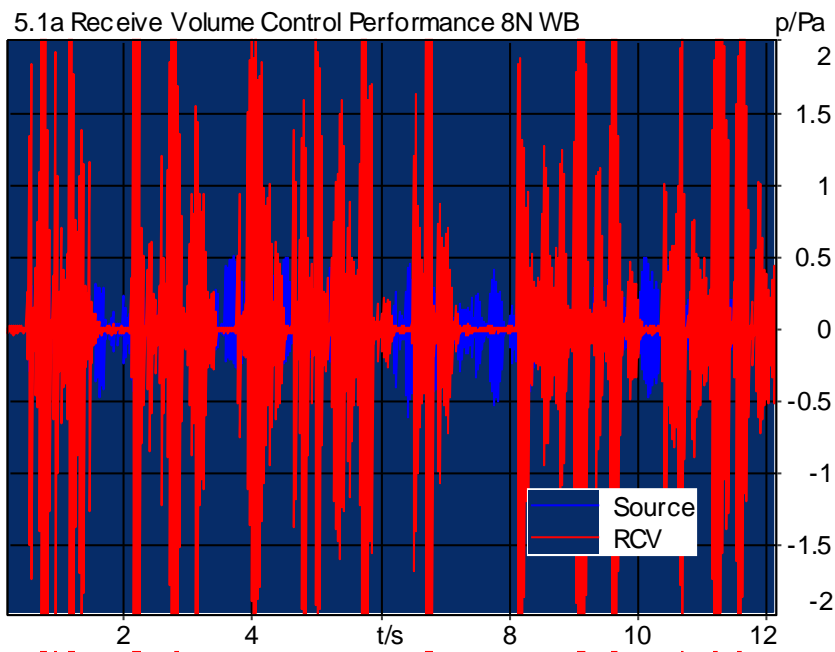
Cross correlation avg.　FFT Size:131072　Overlap:0.0%　Envelope Ⅰ　%
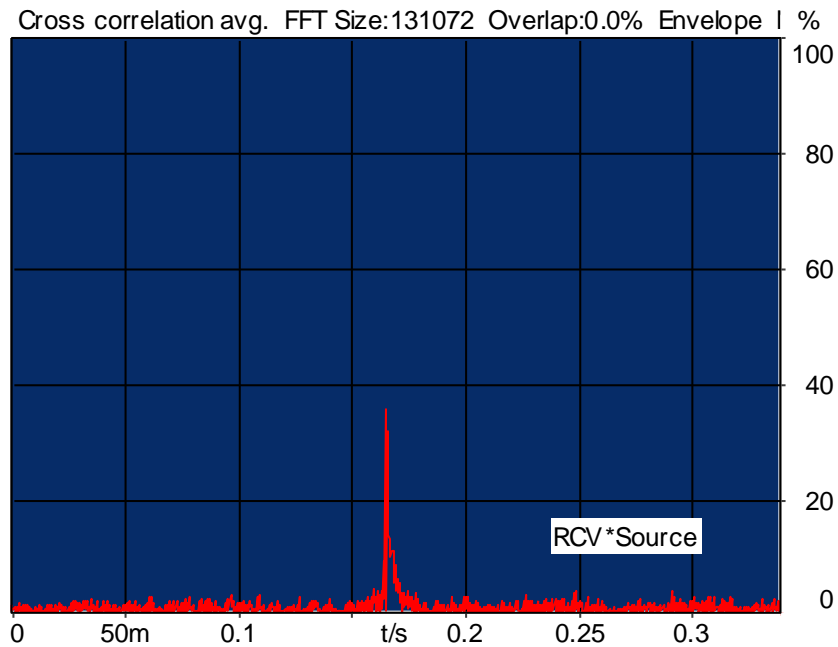
Channel	Delay	Correlation
RCV*Source	165.8 ms	35.91 %

2025-04-01 上午 06:06　　ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

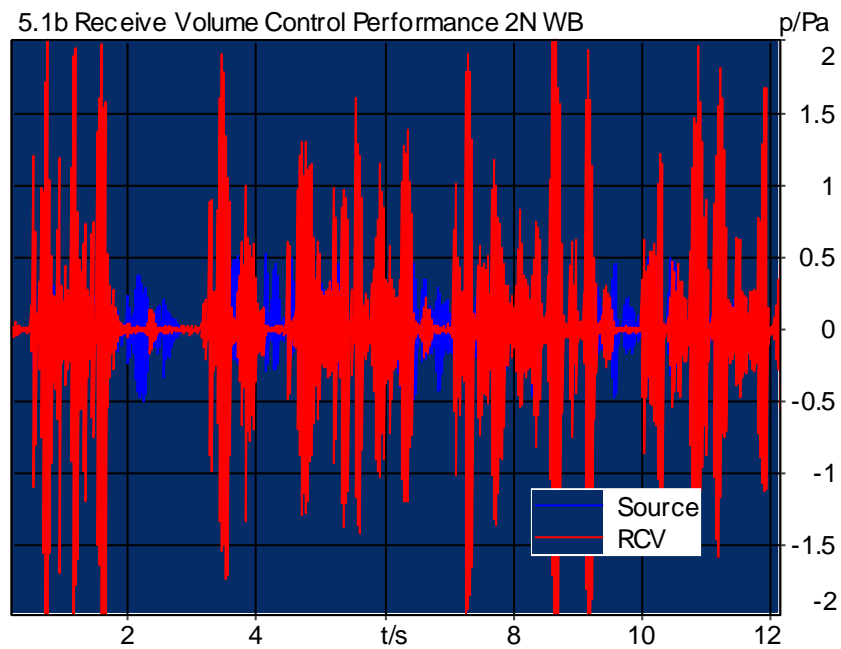| Channel	Speech level	Activity	
RCV	88.15 dB[SPL]	44.74%	Ok

Ok

2025-04-01 上午 06:07   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB

Channel	Speech level	Activity	
RCV	87.19 dB[SPL]	22.16%	Ok

Ok

2025-04-01 上午 06:13   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

#7 FR1 n14 EVS WB 5.9kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	202.7
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.94
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	87.88

Overall Receive Delay WB

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

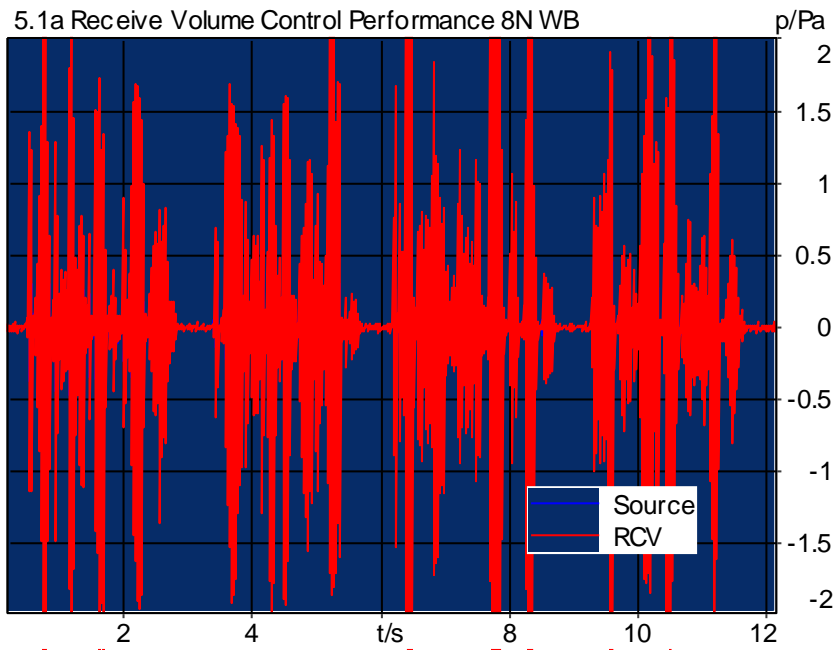Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope Ⅰ %
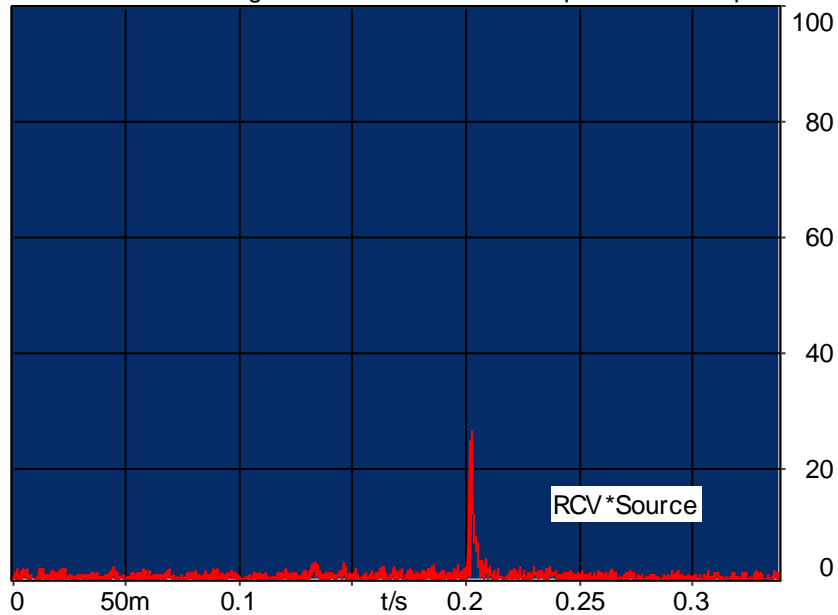
Channel	Delay	Correlation
RCV*Source	202.7 ms	26.31 %

2025-05-01 上午 07:23   ACQUA 6.1.110

5.1a Receive Volume Control Performance 8N WB

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

5.1a Receive Volume Control Performance 8N WB

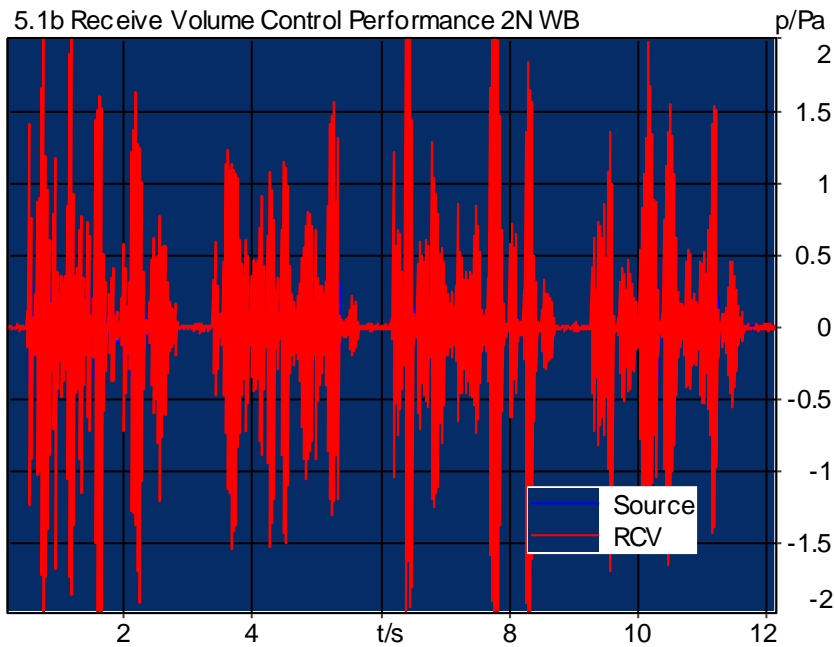| Channel	Speech level	Activity	
RCV	88.94 dB[SPL]	25.16%	Ok

Ok

2025-05-01 上午 07:23　　ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N WB

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

5.1b Receive Volume Control Performance 2N WB

Channel	Speech level	Activity	
RCV	87.88 dB[SPL]	19.84%	Ok

Ok

2025-05-01 上午 07:49   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

#8 WiFi 2.4GHz EVS NB 24.4kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	180.0
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	88.48
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	87.28

Overall Receive Delay NB

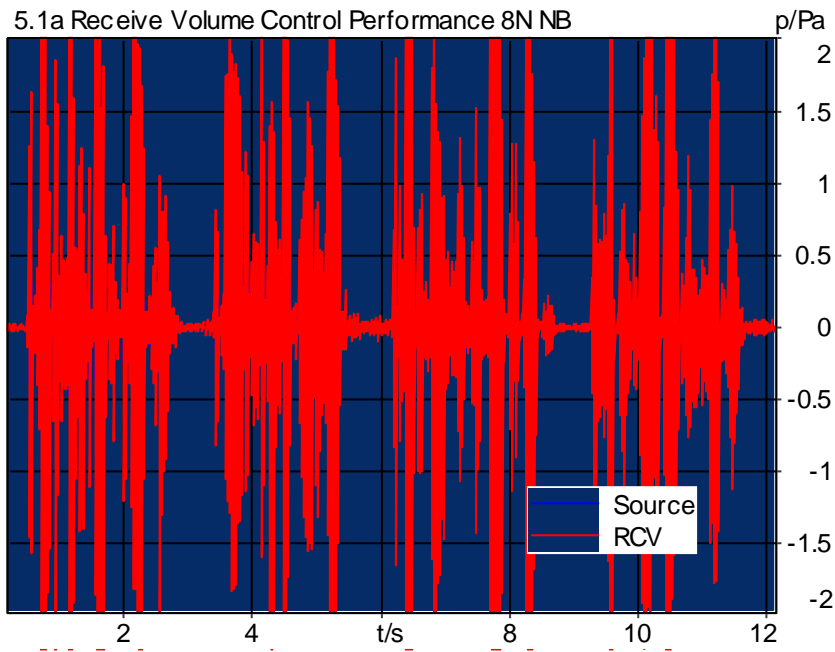TIA-5050 (2018-01) \ Measurements \ Narrowband \ Preparation - Delay measurement

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope I %
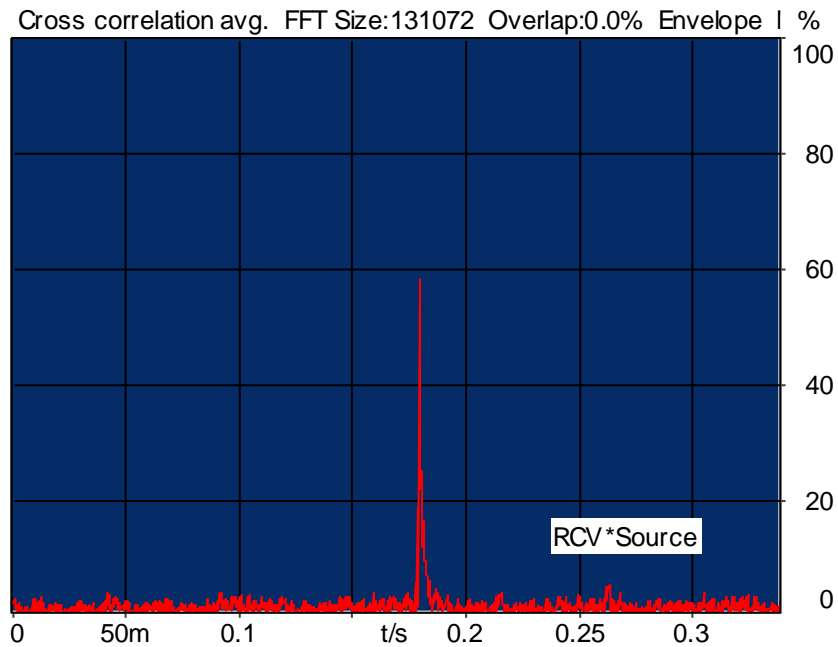
Channel	Delay	Correlation
RCV*Source	180.0 ms	58.29 %

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5.1a Receive Volume Control Performance 8N NB

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

5.1a Receive Volume Control Performance 8N NB

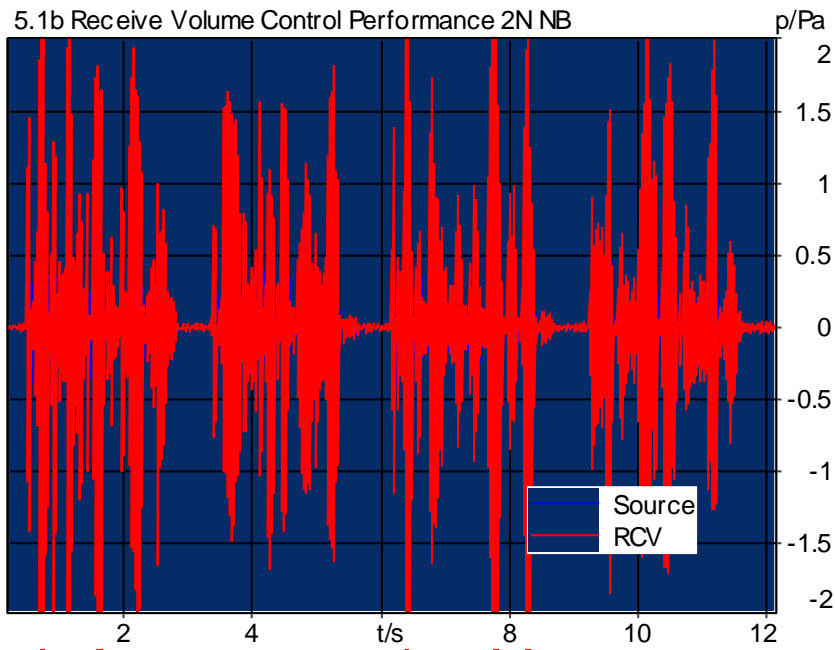| Channel	Speech level	Activity	
RCV	88.48 dB[SPL]	38.38%	Ok

Ok

2025-04-02 上午 11:02   ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]

5.1b Receive Volume Control Performance 2N NB

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

5.1b Receive Volume Control Performance 2N NB

Channel	Speech level	Activity	
RCV	87.28 dB[SPL]	29.23%	Ok

Ok

2025-04-02 上午 11:26　　ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]