

**Appendix A. Volume Control Evaluation Results****<Evaluation results for KDB 285076 D05 2.a>****#1 WiFi 6GHz EVS NB 24.4Kbps**

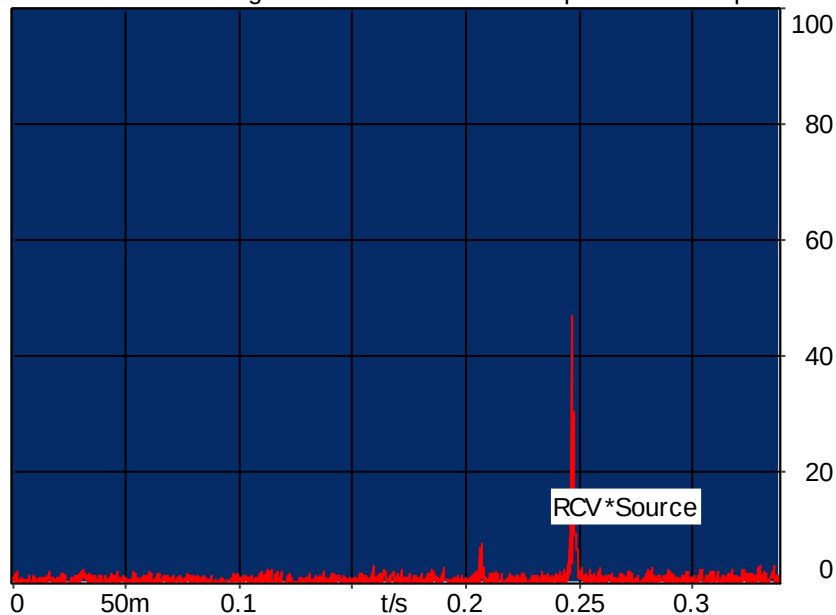
SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	247.3
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	88.42
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	83.75
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.20
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.41
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.65
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.33
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.76
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	40.40
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	29.37
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.87
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.06
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	41.69
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	47.17
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	45.76
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	40.82
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.40
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	22.87
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.40
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.85
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.93
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.03
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.05
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	40.29
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.23
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.36
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	43.28
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.91
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	46.28
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.45
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	44.78
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.37
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 250Hz)	28.40
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 1285.9 Hz	0.01
5.3 Frequency Response 2N FF	Ok	Min. dist. to tolerance scheme [dB], 1151.2 Hz	0.06



Overall Receive Delay WB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelope I %



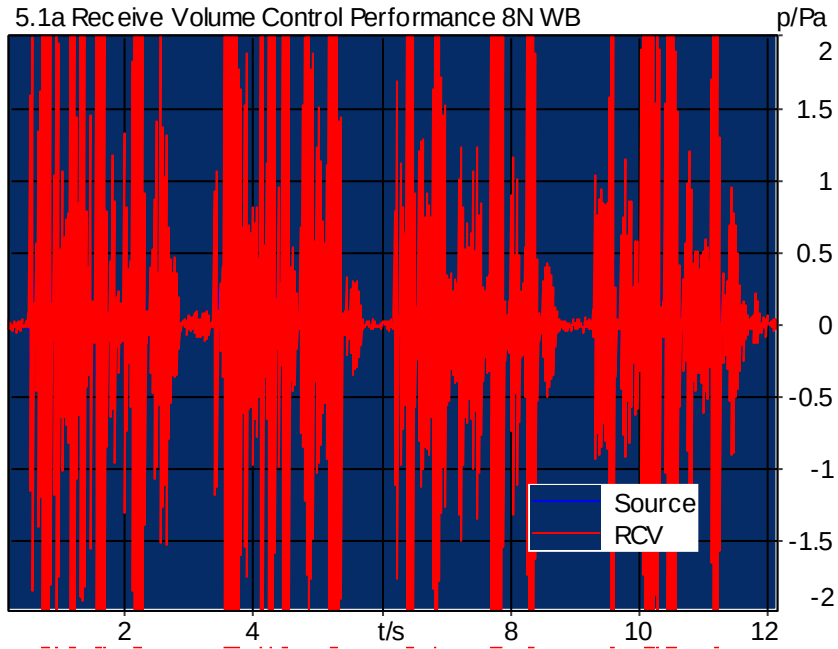
Channel	Delay	Correlation
RCV*Source	247.3 ms	46.73 %

2025-11-14 下午 04:57 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	88.42 dB[SPL]	81.17%	Ok

Ok

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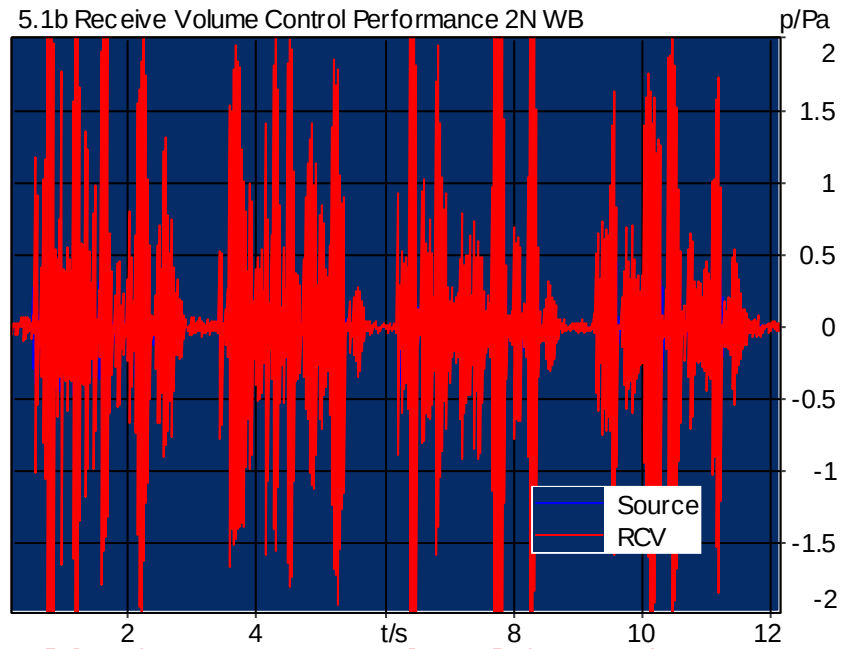
Limits

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	83.75 dB[SPL]	83.46%	Ok

Ok

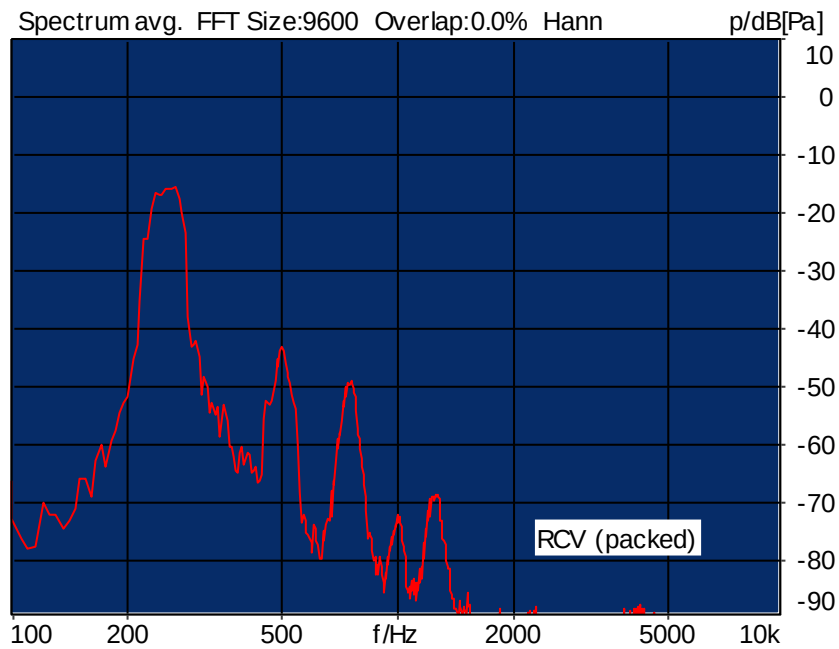
2025-11-14 下午 05:36 ACQUA 6.1.110

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): 29.20 dB (3.47%) Ok

Ok

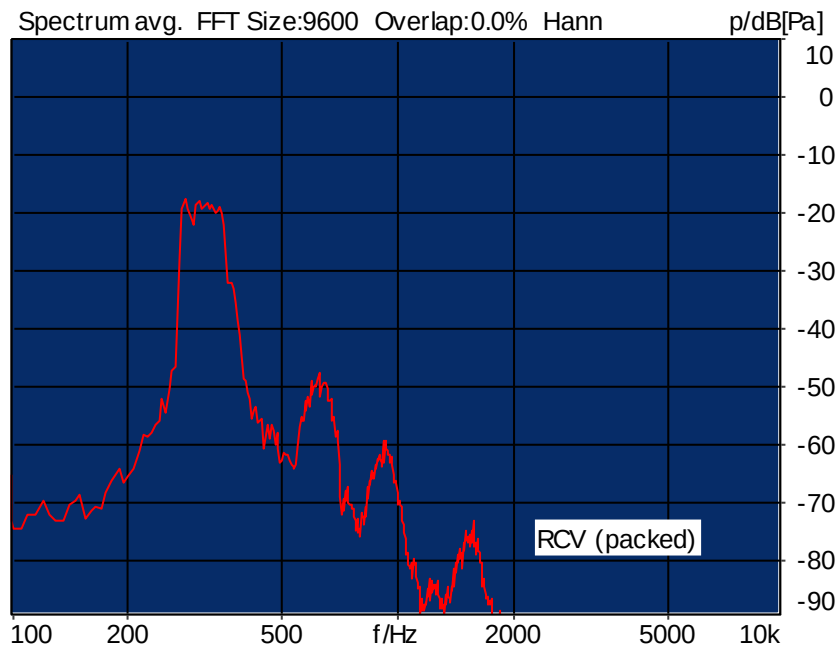
2025-11-14 下午 05:36 ACQUA 6.1.110

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): 30.41 dB (3.02%) Ok

Ok

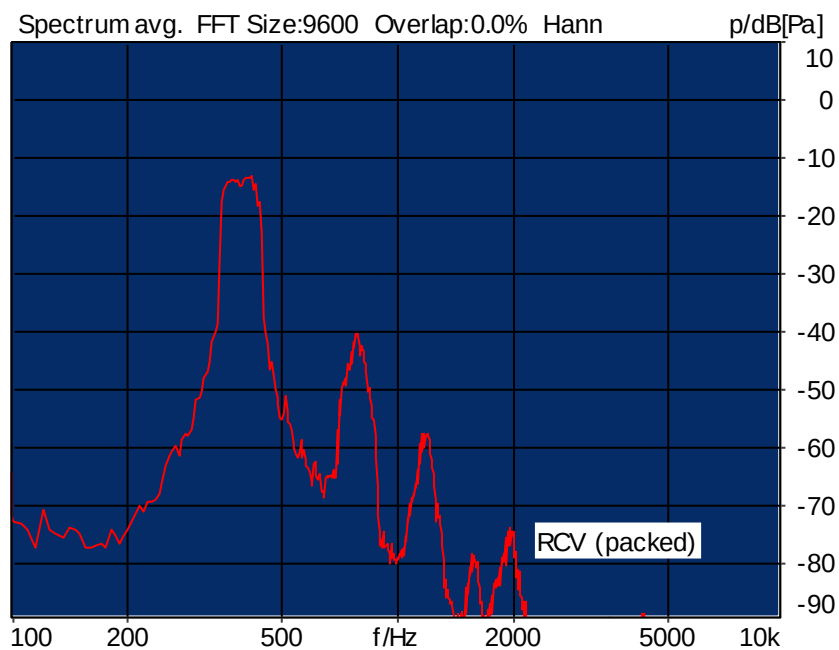
2025-11-14 下午 05:37 ACQUA 6.1.110

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): 28.65 dB (3.70%) Ok

Ok

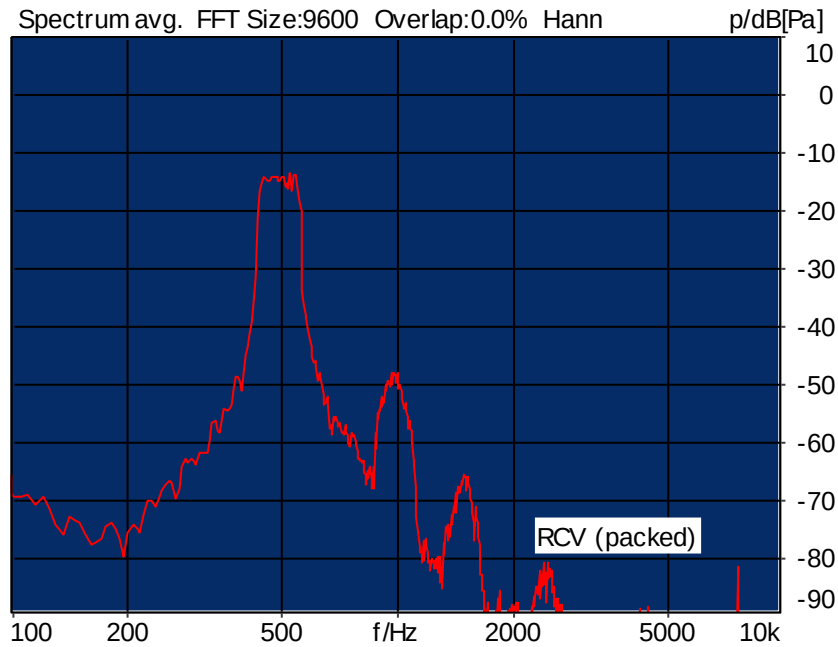
2025-11-14 下午 05:38 ACQUA 6.1.110

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): 32.33 dB (2.42%) Ok

Ok

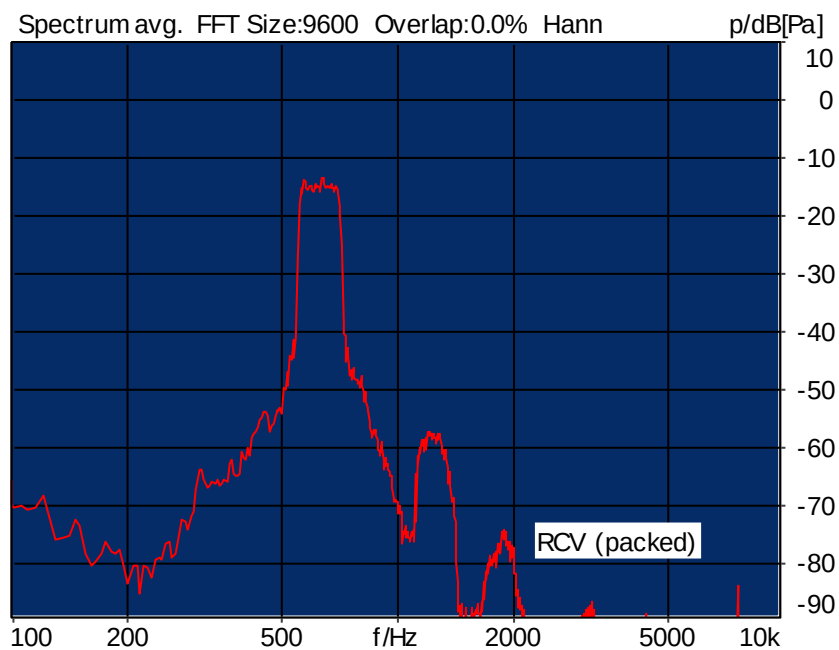
2025-11-14 下午 05:38 ACQUA 6.1.110

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): 34.76 dB (1.83%) Ok

Ok

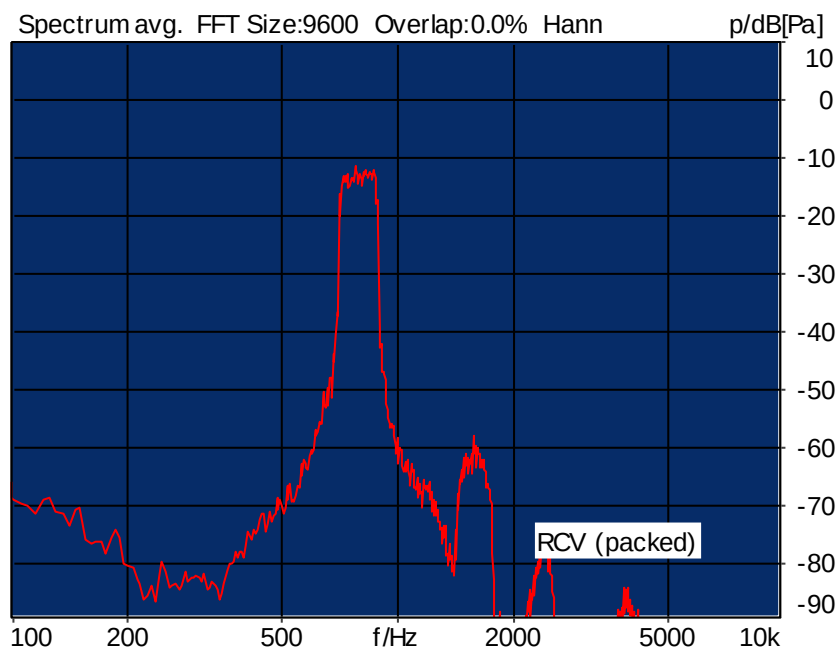
2025-11-14 下午 05:39 ACQUA 6.1.110

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): 40.40 dB (0.95%) Ok

Ok

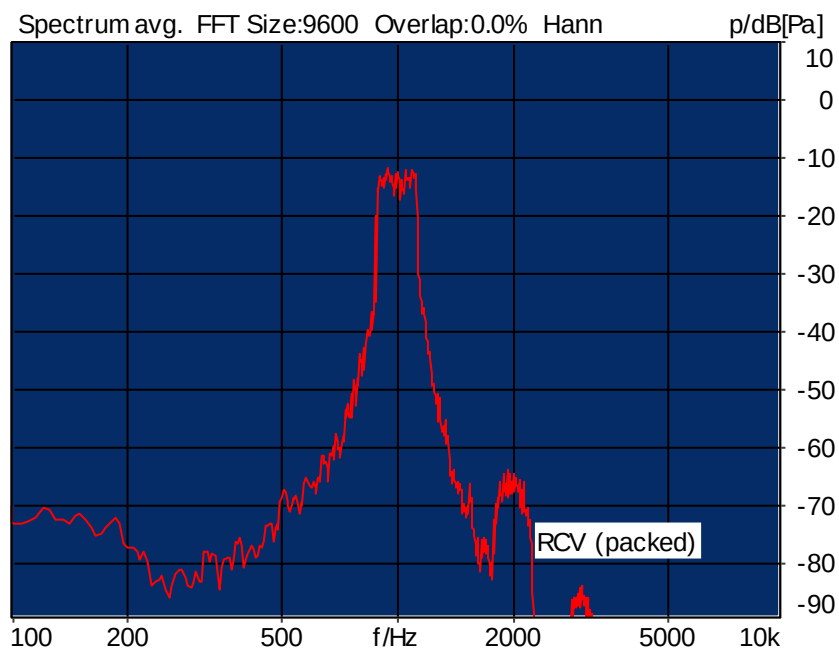
2025-11-14 下午 05:39 ACQUA 6.1.110

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): 29.37 dB (3.40%) Ok

Ok

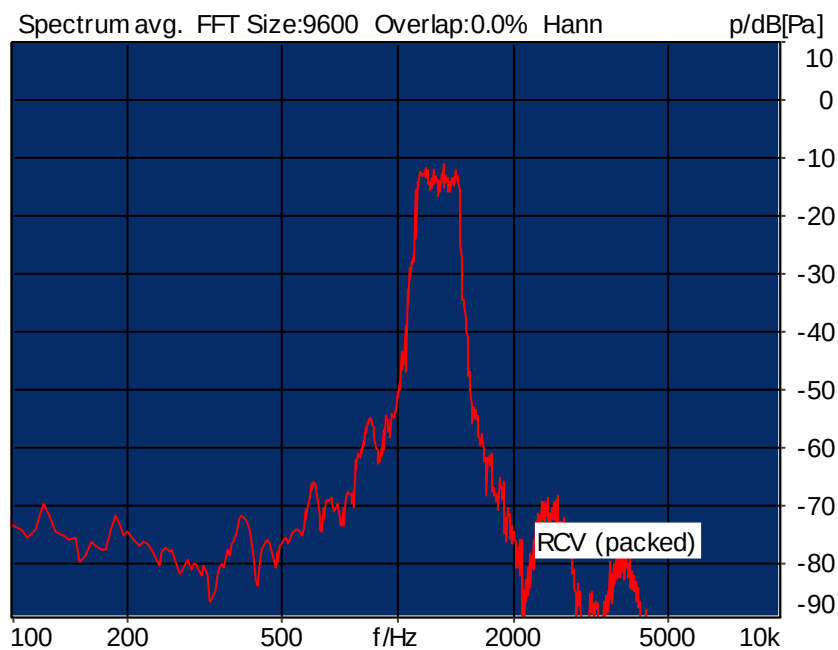
2025-11-14 下午 05:40 ACQUA 6.1.110

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): 22.87 dB (7.19%) Ok

Ok

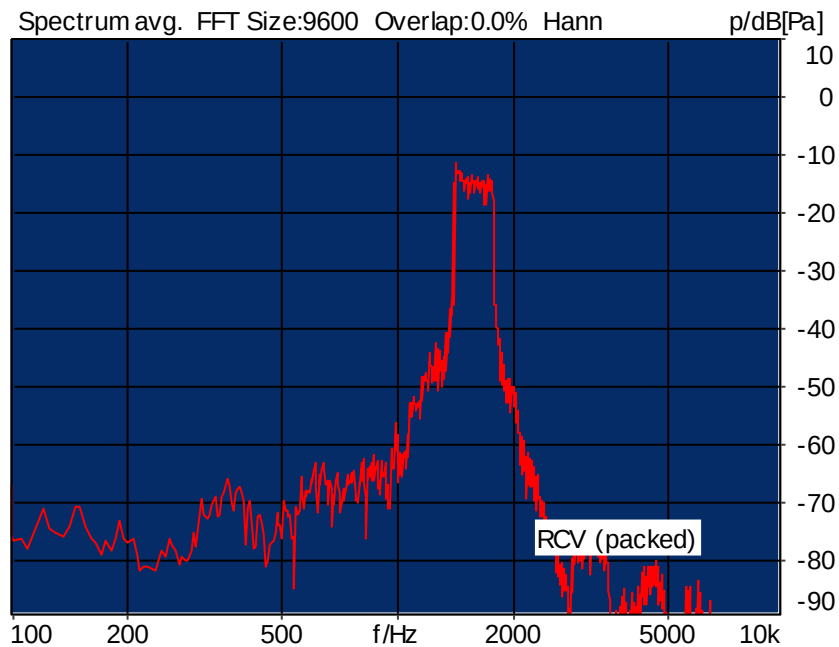
2025-11-14 下午 05:40 ACQUA 6.1.110

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): 30.06 dB (3.14%) Ok

Ok

2025-11-14 下午 05:41 ACQUA 6.1.110

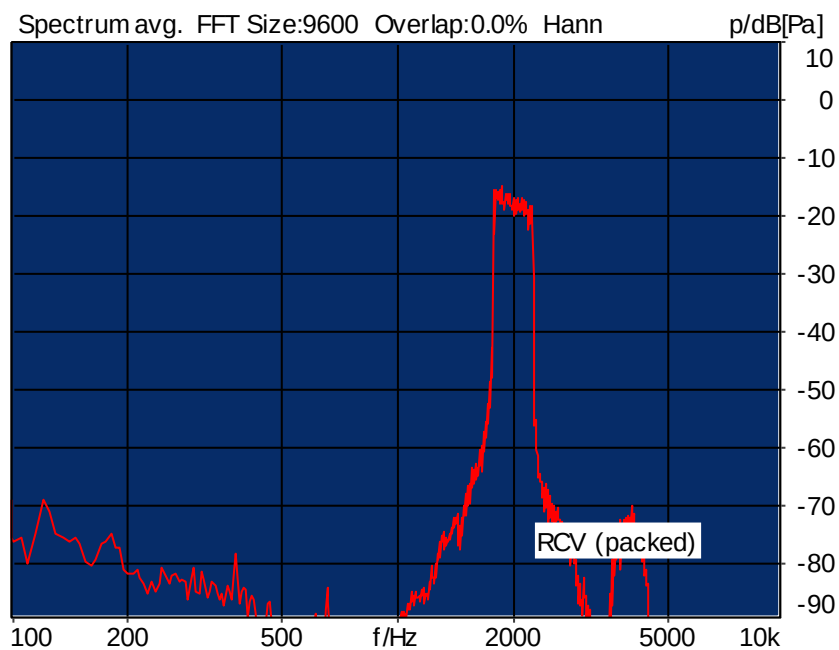
Limits

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): 41.69 dB (0.82%) Ok

Ok

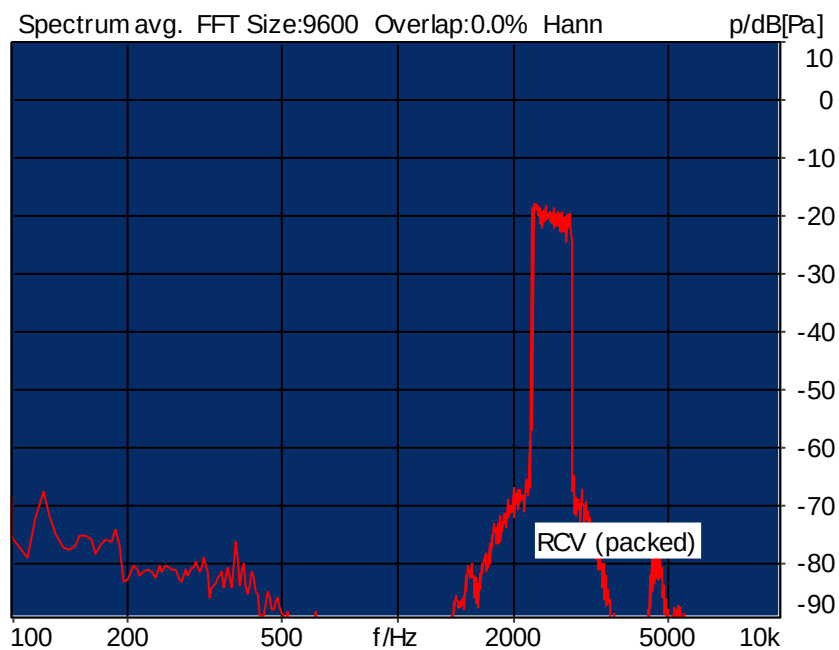
2025-11-14 下午 05:41 ACQUA 6.1.110

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): 47.17 dB (0.44%) Ok

Ok

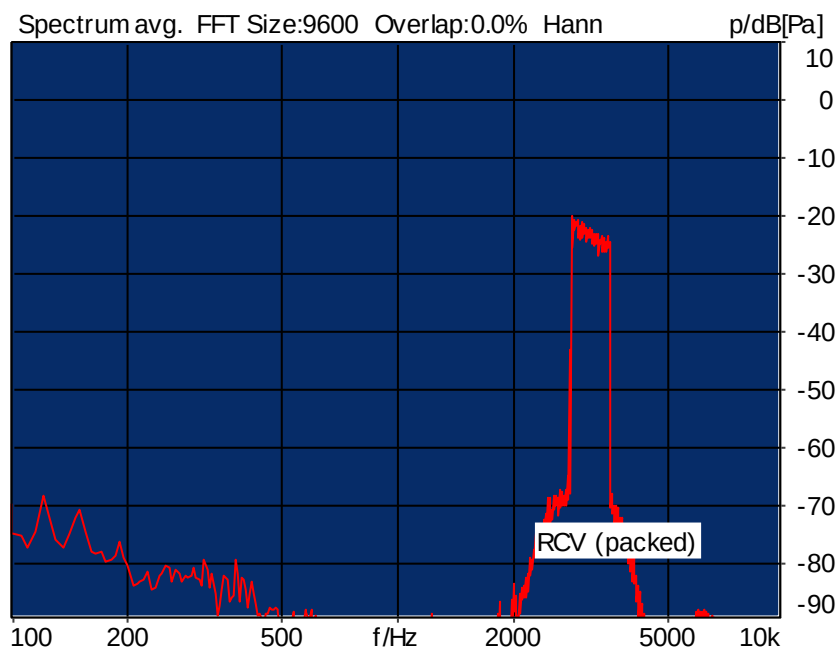
2025-11-14 下午 05:42 ACQUA 6.1.110

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): 45.76 dB (0.52%) Ok

Ok

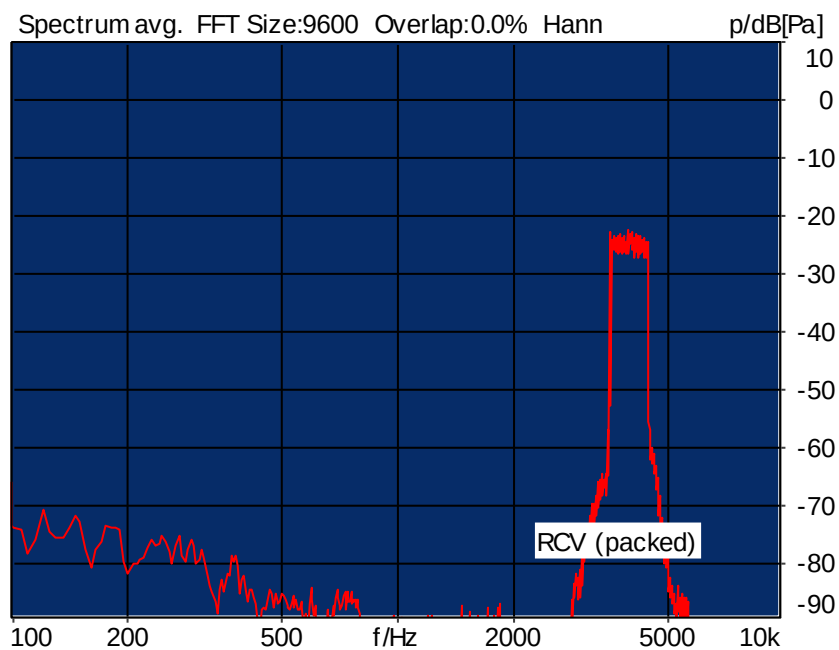
2025-11-14 下午 05:42 ACQUA 6.1.110

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): 40.82 dB (0.91%) Ok

Ok

2025-11-14 下午 05:43 ACQUA 6.1.110

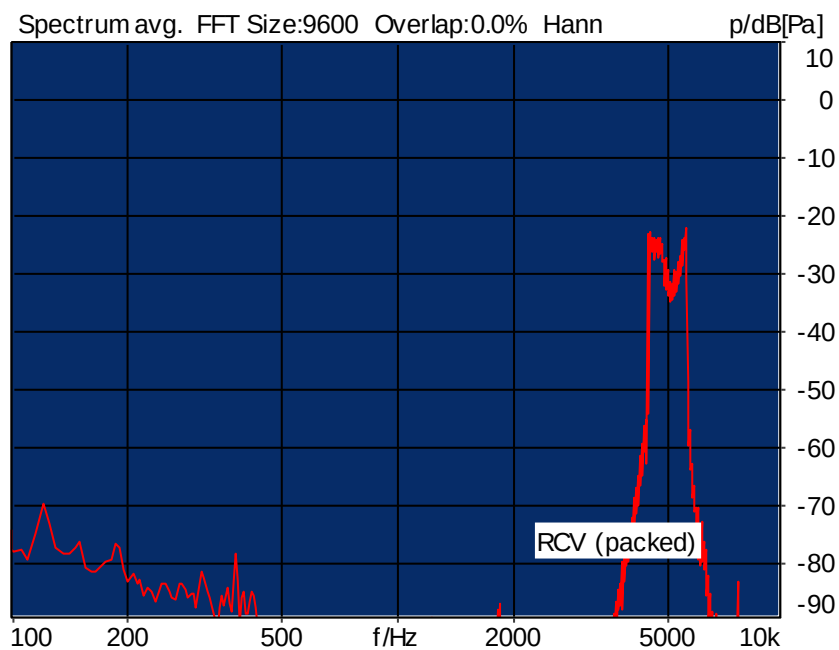
Limits

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): 37.40 dB (1.35%) Ok

Ok

2025-11-14 下午 05:43 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

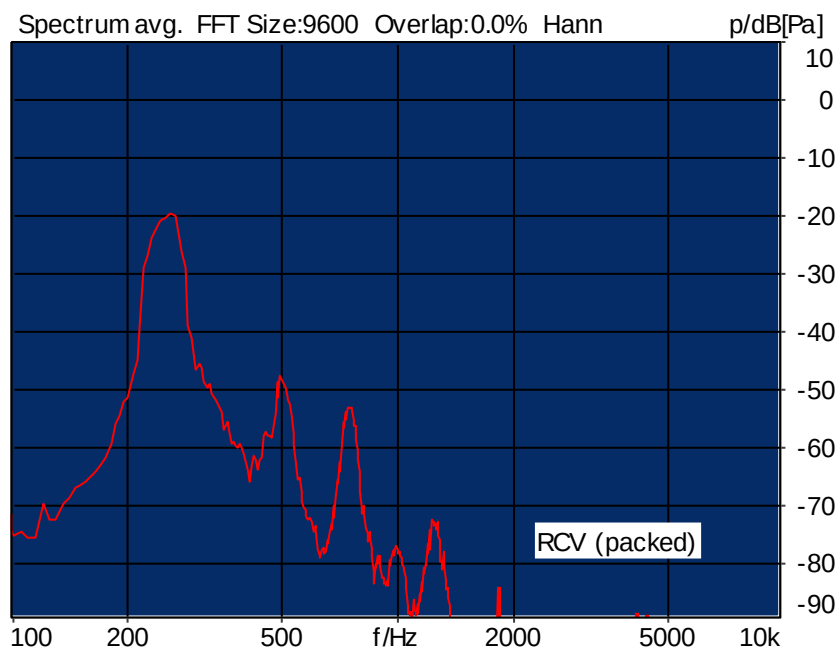
Region	Frequency	SDNR
1	250Hz	29.20 dB
2	315Hz	30.41 dB
3	400Hz	28.65 dB
4	500Hz	32.33 dB
5	630Hz	34.76 dB
6	800Hz	40.40 dB
7	1000Hz	29.37 dB
8	1250Hz	22.87 dB
9	1600Hz	30.06 dB
10	2000Hz	41.69 dB
11	2500Hz	47.17 dB
12	3150Hz	45.76 dB
13	4000Hz	40.82 dB
14	5000Hz	37.40 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 22.87dB at 1250Hz.

2025-11-14 下午 05:43 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): 28.40 dB (3.80%) Ok

Ok

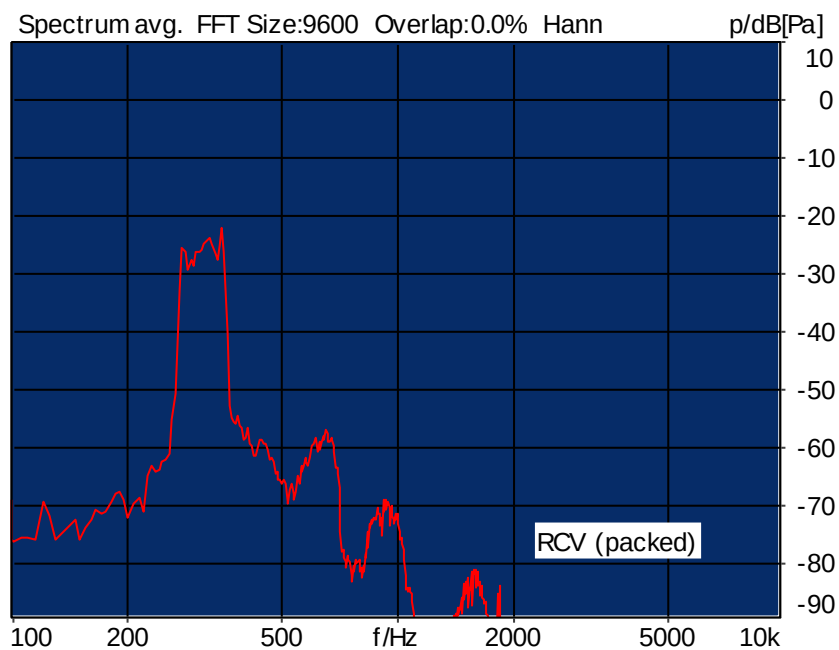
2025-11-14 下午 05:44 ACQUA 6.1.110

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): 31.85 dB (2.55%) Ok

Ok

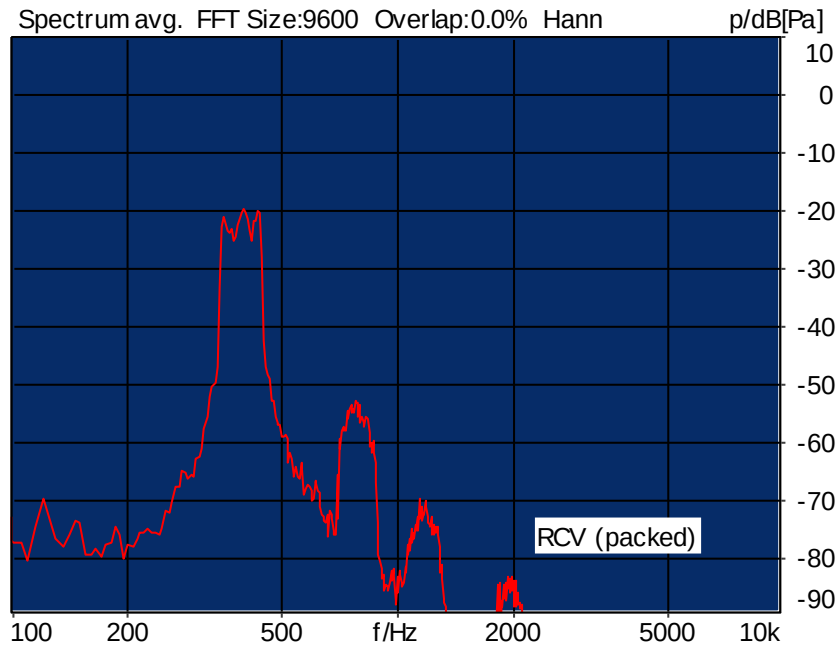
2025-11-14 下午 05:45 ACQUA 6.1.110

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): 31.93 dB (2.53%) Ok

Ok

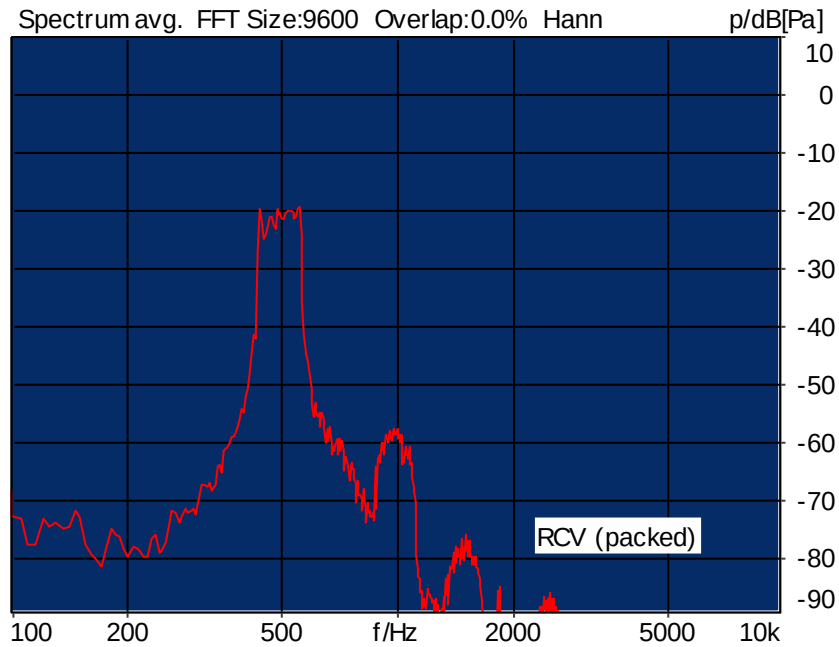
2025-11-14 下午 05:45 ACQUA 6.1.110

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): 34.03 dB (1.99%) Ok

Ok

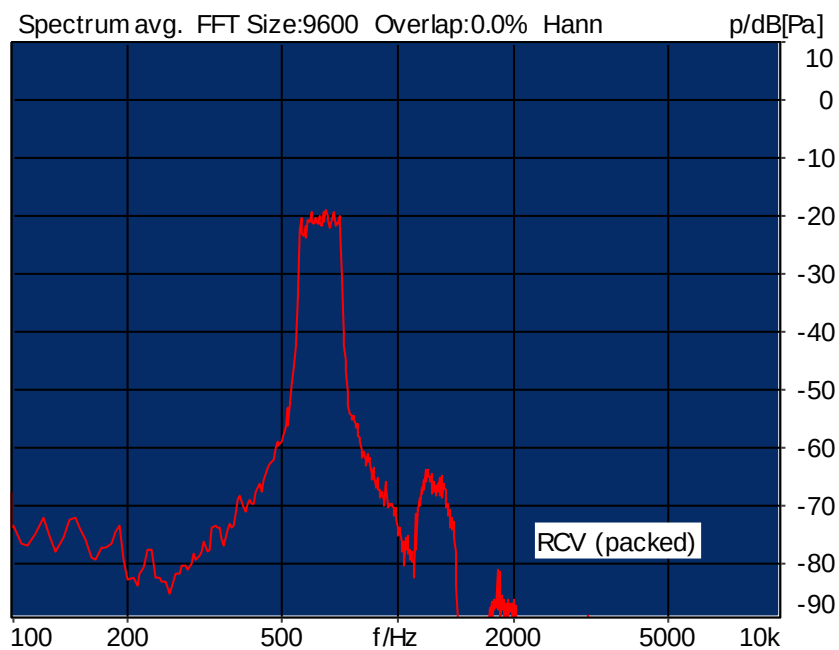
2025-11-14 下午 05:46 ACQUA 6.1.110

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): 37.05 dB (1.40%) Ok

Ok

2025-11-14 下午 05:46 ACQUA 6.1.110

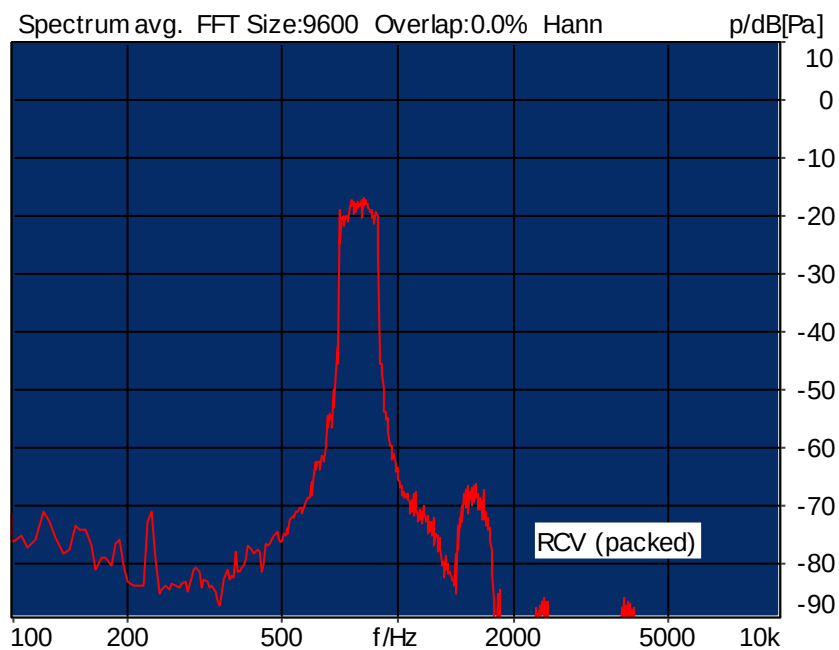
Limits

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): 40.29 dB (0.97%) Ok

Ok

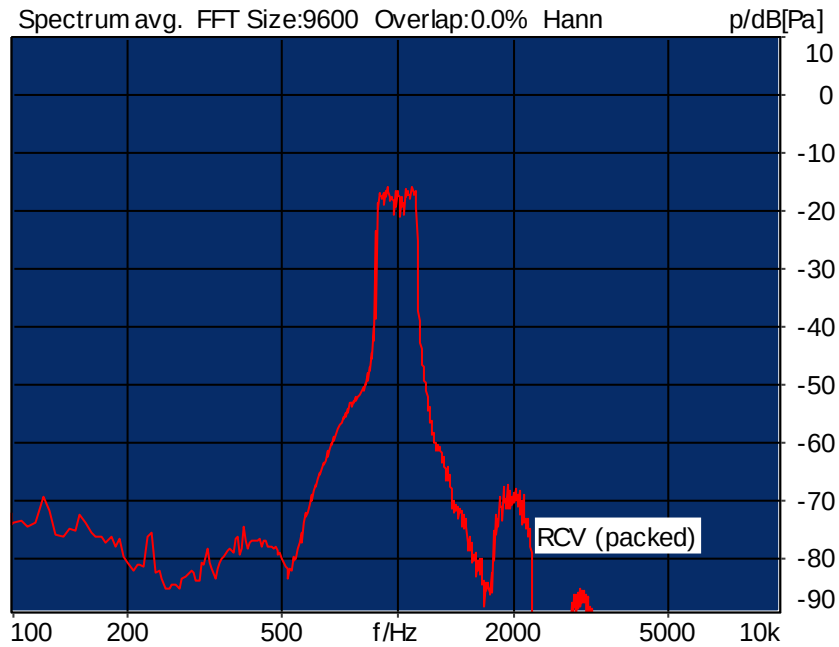
2025-11-14 下午 05:47 ACQUA 6.1.110

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): 34.23 dB (1.94%) Ok

Ok

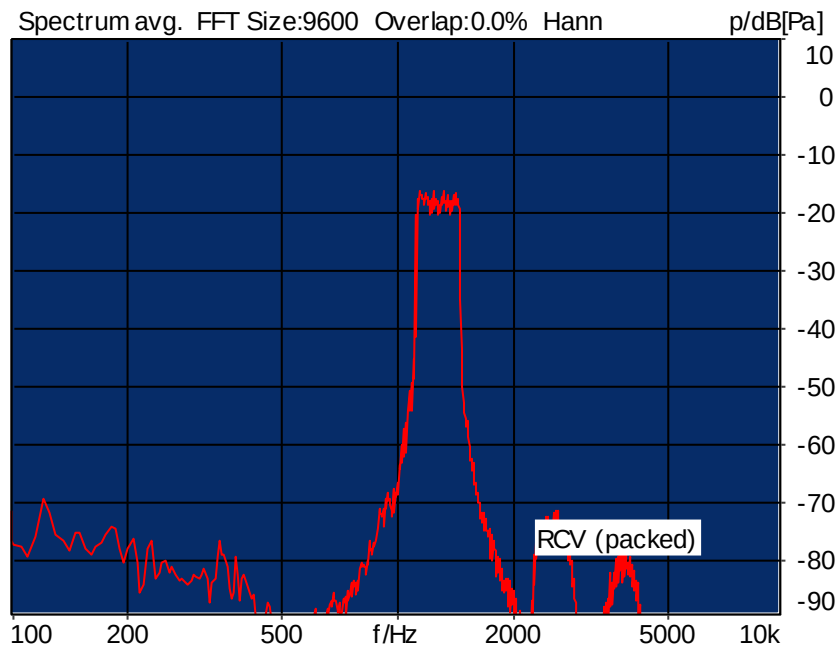
2025-11-14 下午 05:47 ACQUA 6.1.110

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): 32.36 dB (2.41%) Ok

Ok

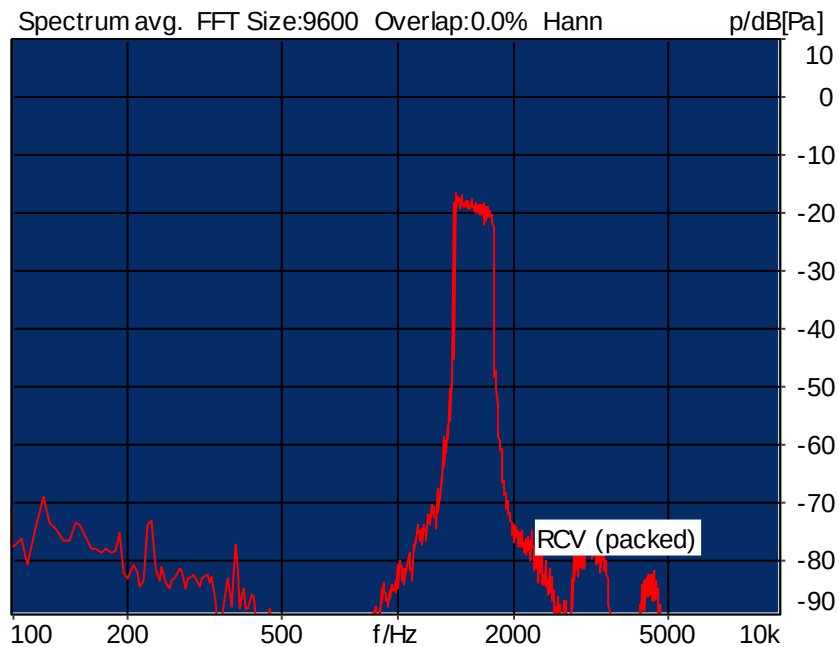
2025-11-14 下午 05:48 ACQUA 6.1.110

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): 43.28 dB (0.69%) Ok

Ok

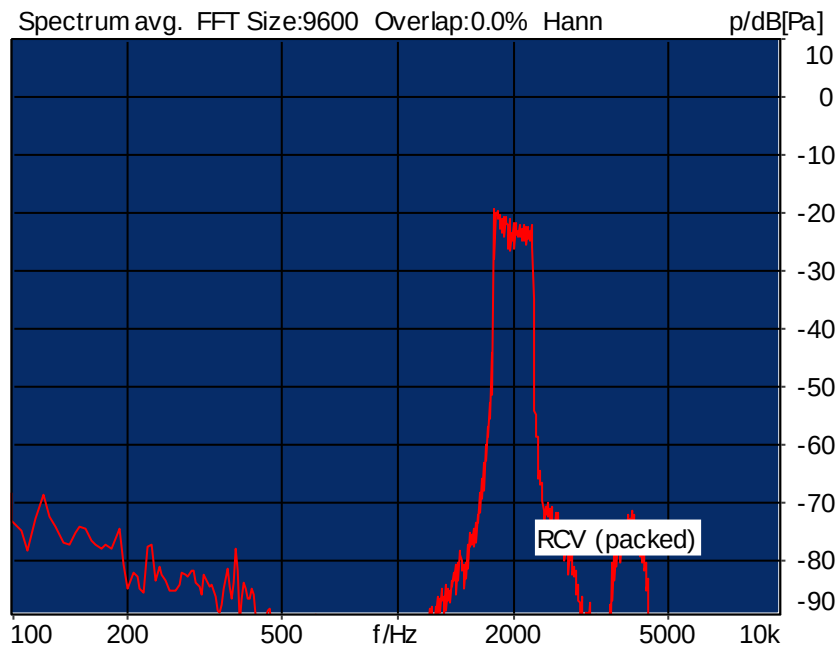
2025-11-14 下午 05:48 ACQUA 6.1.110

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): 39.91 dB (1.01%) Ok

Ok

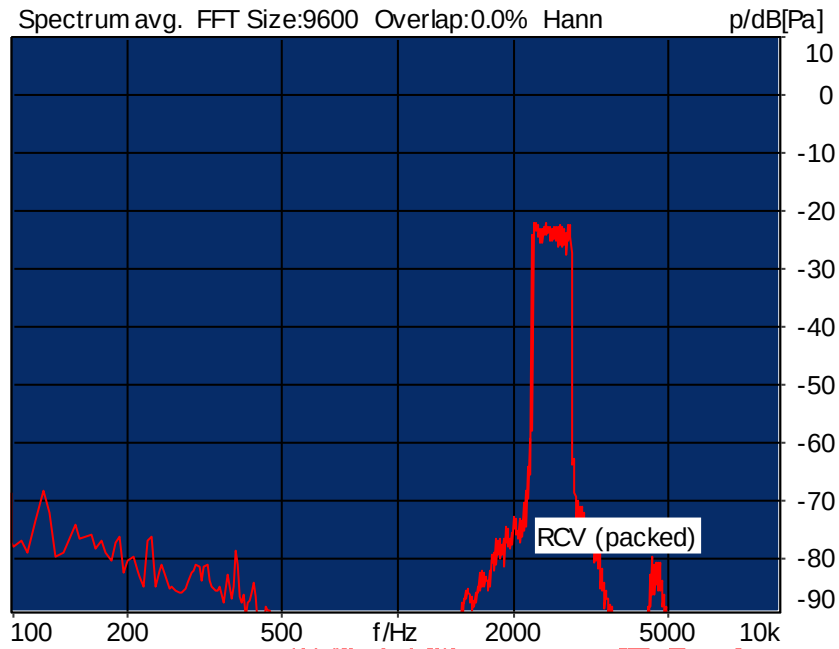
2025-11-14 下午 05:49 ACQUA 6.1.110

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): 46.28 dB (0.49%) Ok

Ok

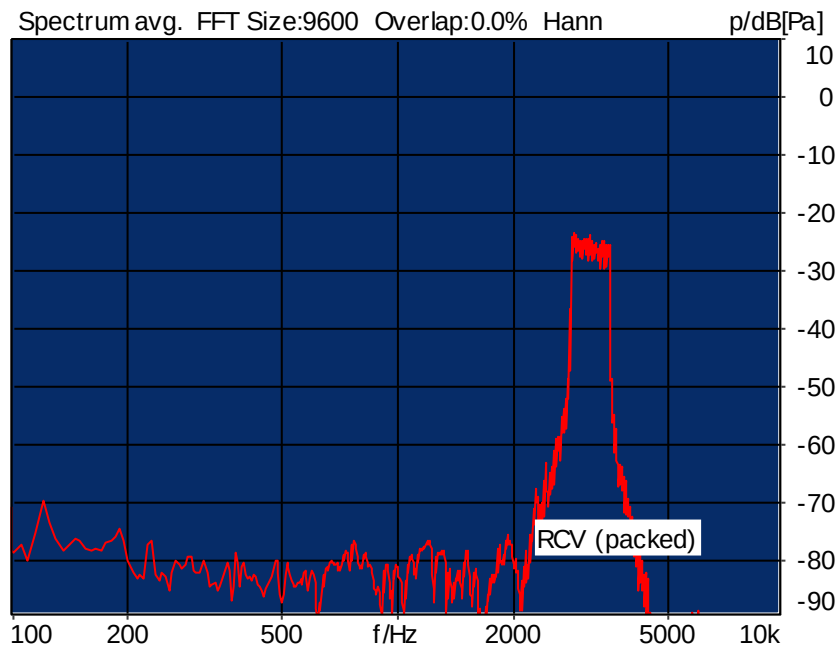
2025-11-14 下午 05:49 ACQUA 6.1.110

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



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

Ok

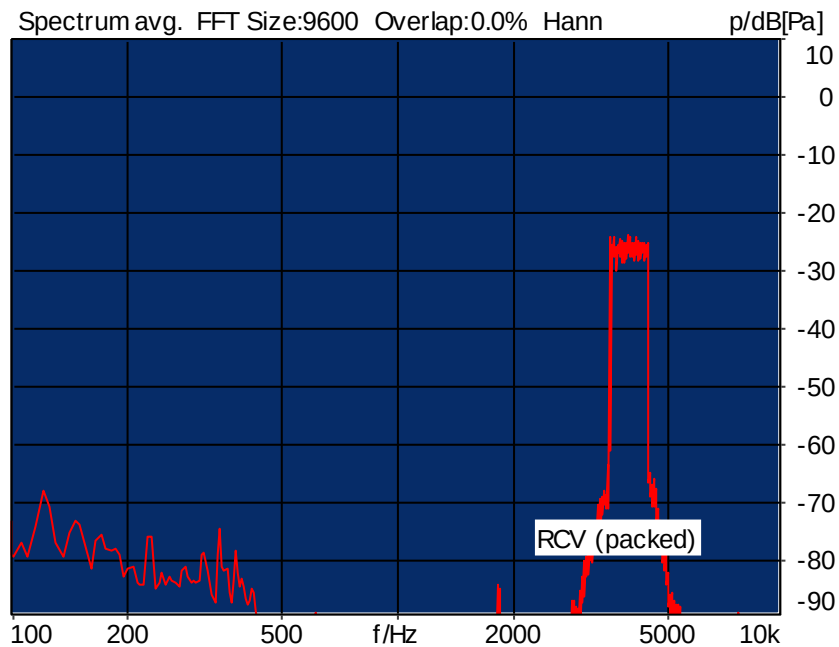
2025-11-14 下午 05:50 ACQUA 6.1.110

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): 44.78 dB (0.58%) Ok

Ok

2025-11-14 下午 05:50 ACQUA 6.1.110

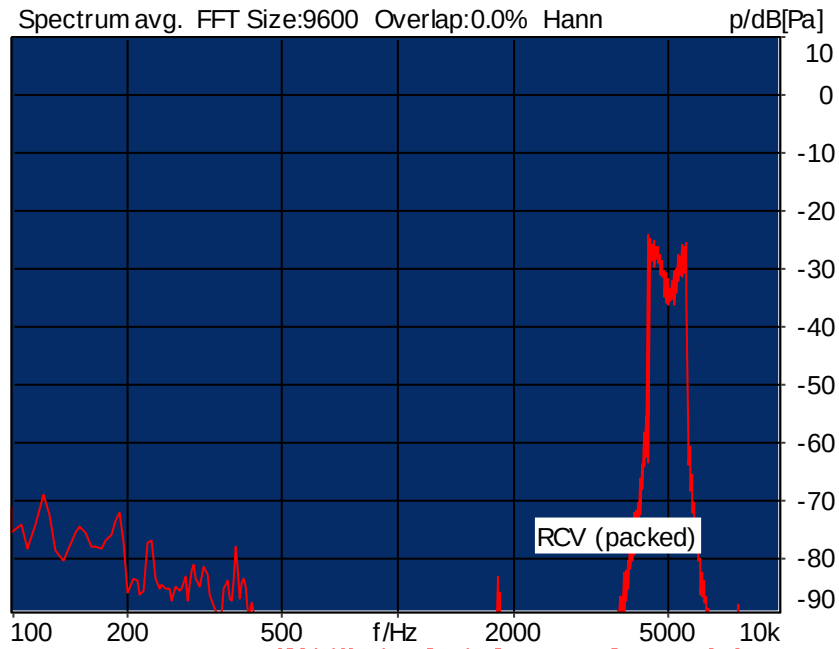
Limits

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): 38.37 dB (1.21%) Ok

Ok

2025-11-14 下午 05:51 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

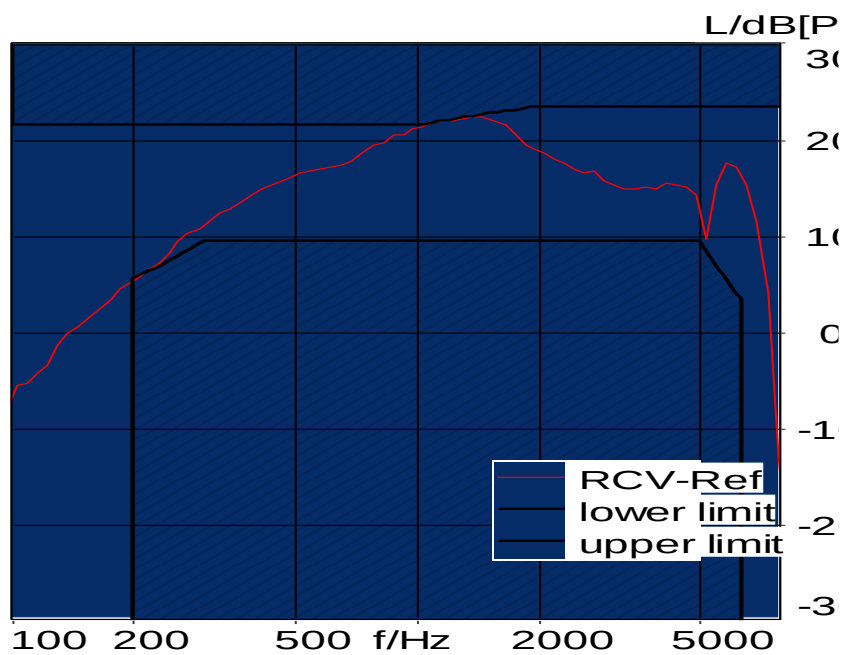
Region	Frequency	SDNR
1	250Hz	28.40 dB
2	315Hz	31.85 dB
3	400Hz	31.93 dB
4	500Hz	34.03 dB
5	630Hz	37.05 dB
6	800Hz	40.29 dB
7	1000Hz	34.23 dB
8	1250Hz	32.36 dB
9	1600Hz	43.28 dB
10	2000Hz	39.91 dB
11	2500Hz	46.28 dB
12	3150Hz	31.45 dB
13	4000Hz	44.78 dB
14	5000Hz	38.37 dB

All SDNRs were greater than 20.0 dB, requirement was met.
Smallest SDNR was 28.40dB at 250Hz.

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5.3 Frequency Response 8N FF

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



Absolute minimal distance

0.01 dB at 1285.9 Hz Ok

Ok

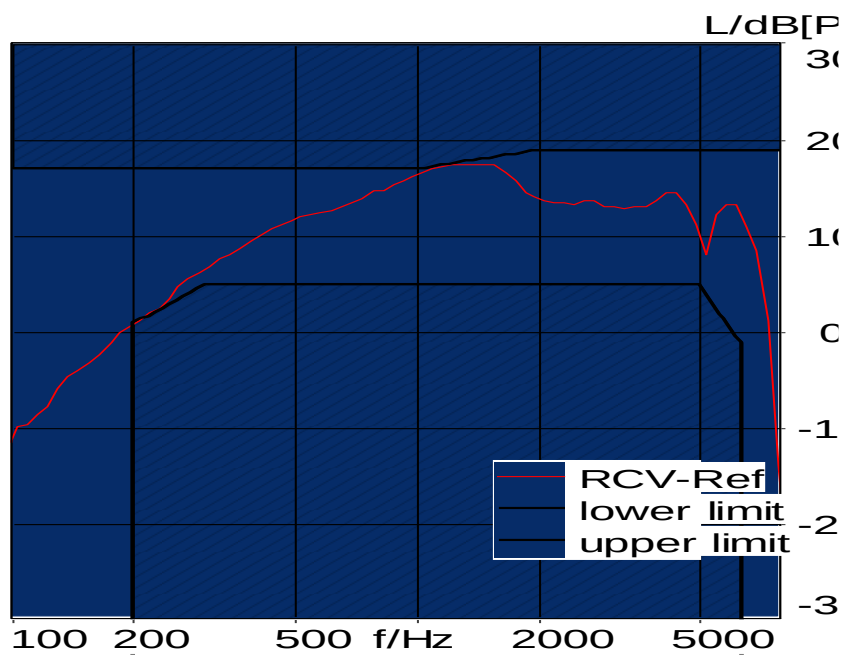
2025-11-14 下午 05:23 ACQUA 6.1.110

Limits

lower
Fit into tolerance

5.3 Frequency Response 2N FF

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



Absolute minimal distance

0.06 dB at 1151.2 Hz Ok

Ok

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Limits

lower
Fit into tolerance