



Appendix A. Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.a>



#1 LTE B41 EVS NB 24.4kbps

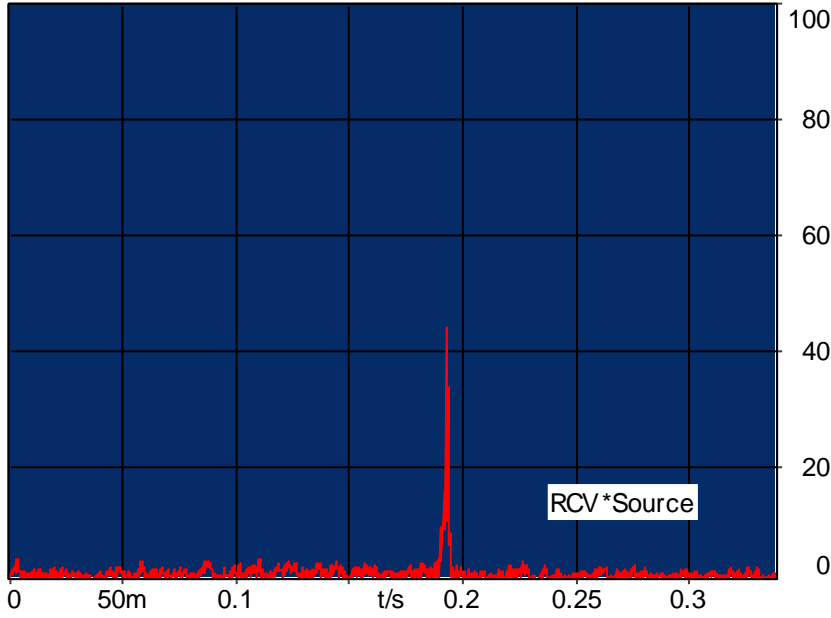
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	193.0
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	90.51
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	87.29
5.2 RCV Distortion and Noise - 400 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.25
5.2 RCV Distortion and Noise - 500 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.00
5.2 RCV Distortion and Noise - 630 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.84
5.2 RCV Distortion and Noise - 800 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.97
5.2 RCV Distortion and Noise - 1000 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	21.31
5.2 RCV Distortion and Noise - 1250 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	20.91
5.2 RCV Distortion and Noise - 1600 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.52
5.2 RCV Distortion and Noise - 2000 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.13
5.2 RCV Distortion and Noise - 2500 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.15
5.2 RCV Distortion and Noise - 3150 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.57
Report - Receive Distortion and Noise (Conversational Gain) 8N NB	Ok	Minimum SDNR [dB], (occured at 1250Hz)	20.91
5.2 RCV Distortion and Noise - 400 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.51
5.2 RCV Distortion and Noise - 500 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.58
5.2 RCV Distortion and Noise - 630 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.89
5.2 RCV Distortion and Noise - 800 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.48
5.2 RCV Distortion and Noise - 1000 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	21.58
5.2 RCV Distortion and Noise - 1250 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	22.04
5.2 RCV Distortion and Noise - 1600 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.27
5.2 RCV Distortion and Noise - 2000 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.30
5.2 RCV Distortion and Noise - 2500 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.21
5.2 RCV Distortion and Noise - 3150 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	44.03
Report - Receive Distortion and Noise (Conversational Gain) 2N NB	Ok	Minimum SDNR [dB], (occured at 1000Hz)	21.58
5.3 Frequency Response 8N DF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	0.34
5.3 Frequency Response 2N DF HANB	Ok	Min. dist. to tolerance scheme [dB], 3882.4 Hz	2.64



Overall Receive Delay NB

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

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



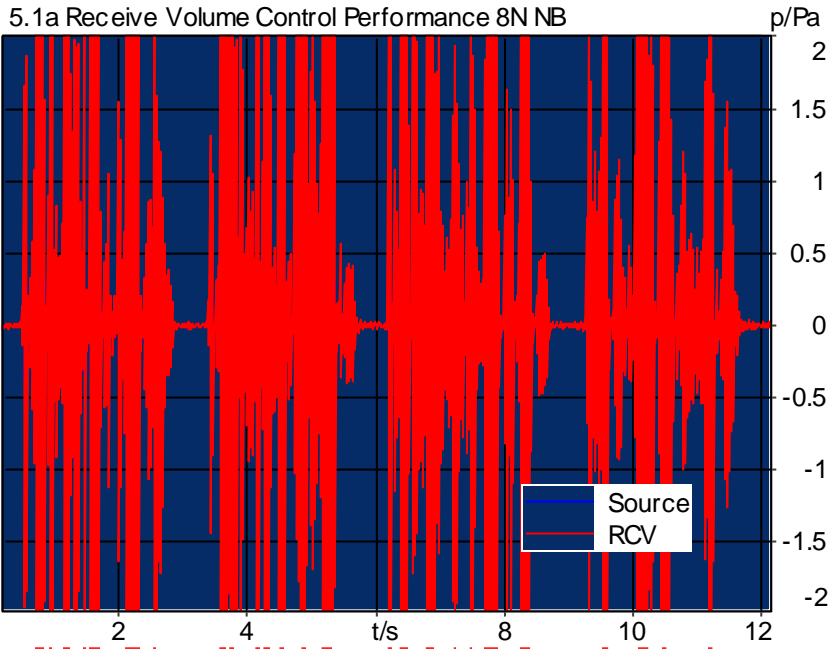
Channel	Delay	Correlation
RCV*Source	193.0 ms	44.25 %

2025-03-04 下午 02:41 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N NB

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



Channel	Speech level	Activity	
RCV	90.51 dB[SPL]	64.74%	Ok

Ok

2025-03-04 下午 02:41 ACQUA 6.1.110

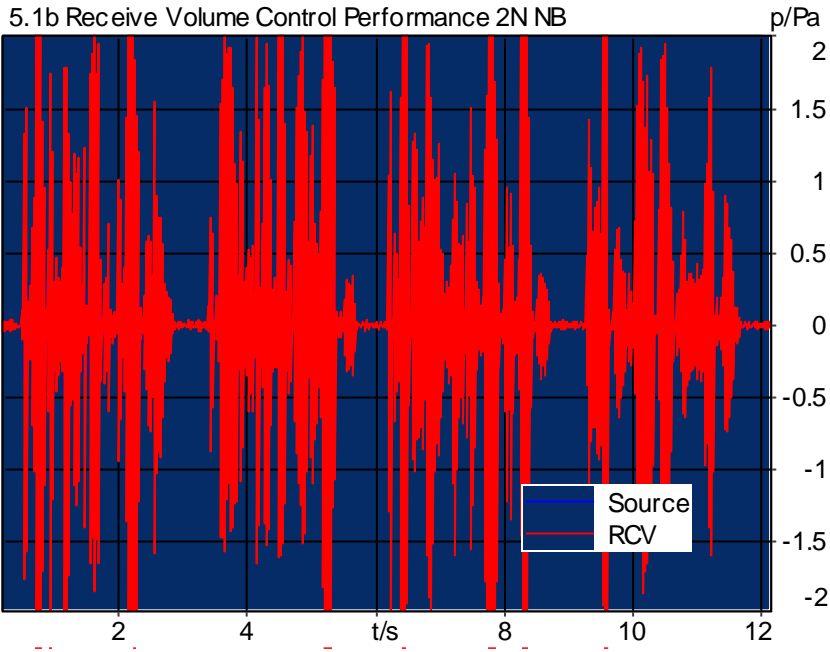
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	87.29 dB[SPL]	50.06%	Ok

Ok

2025-03-04 下午 02:48 ACQUA 6.1.110

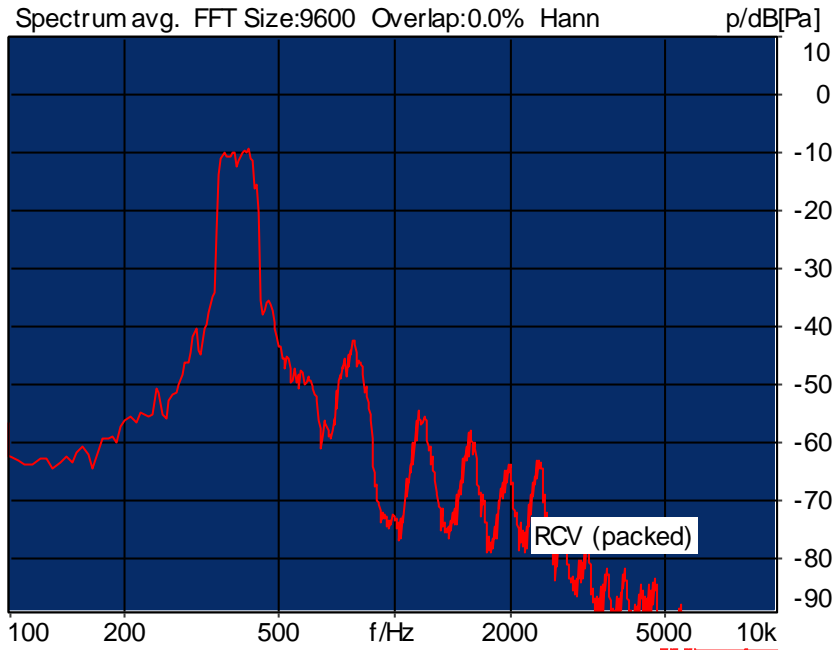
Limits

lower
76.00 dB[SPL]



5.2 RCV Distortion and Noise - 400 Hz 8N NB

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



Distortion (Noise) RCV (packed): 31.25 dB (2.74%) Ok

Ok

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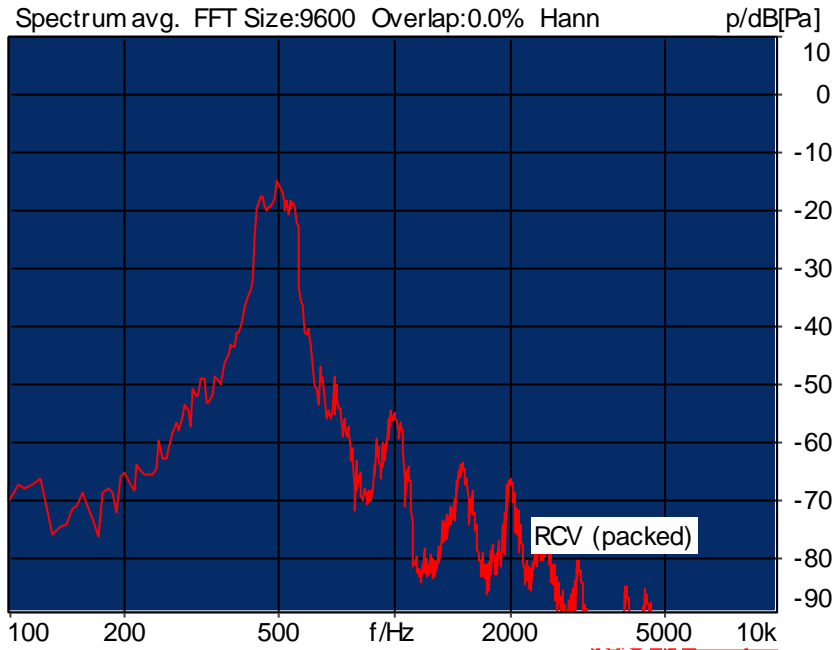
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 500 Hz 8N NB

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



Distortion (Noise) RCV (packed): 29.00 dB (3.55%) Ok

Ok

2025-03-04 下午 02:42 ACQUA 6.1.110

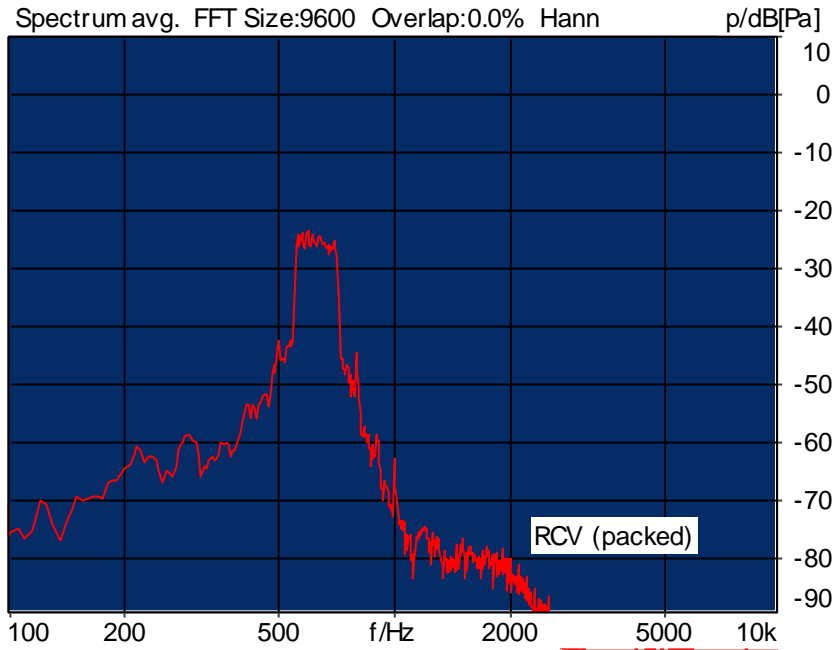
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 630 Hz 8N NB

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



Distortion (Noise) RCV (packed): 24.84 dB (5.73%) Ok

Ok

2025-03-04 下午 02:43 ACQUA 6.1.110

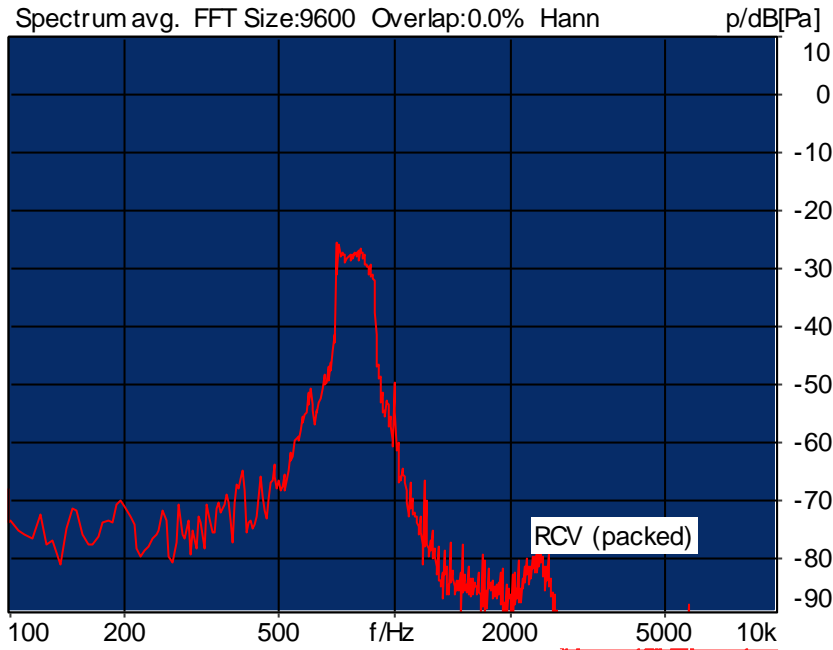
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 800 Hz 8N NB

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



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

Ok

2025-03-04 下午 02:44 ACQUA 6.1.110

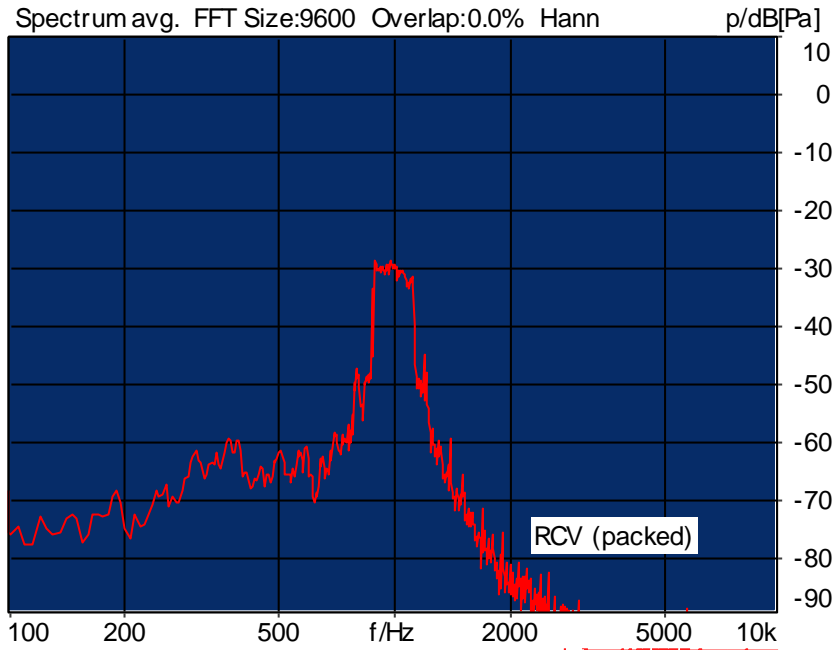
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz 8N NB

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



Distortion (Noise) RCV (packed): 21.31 dB (8.60%) Ok

Ok

2025-03-04 下午 02:44 ACQUA 6.1.110

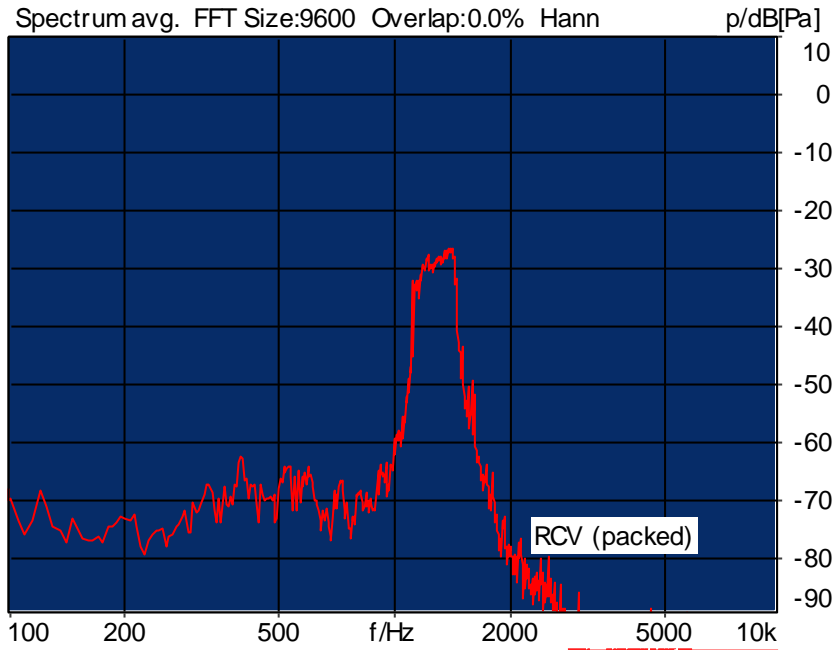
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz 8N NB

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



Distortion (Noise) RCV (packed): 20.91 dB (9.01%) Ok

Ok

2025-03-04 下午 02:45 ACQUA 6.1.110

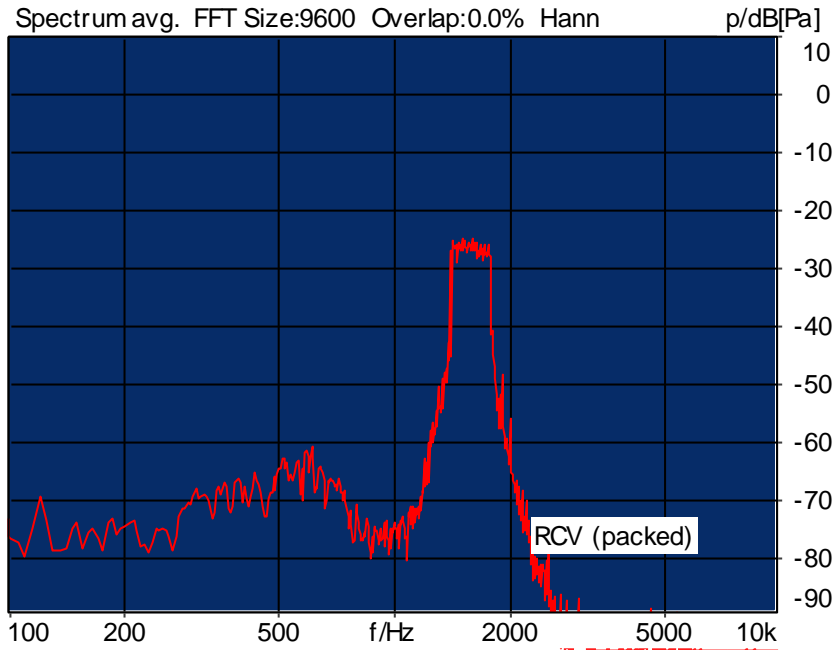
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz 8N NB

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



Distortion (Noise) RCV (packed): 26.52 dB (4.72%) Ok

Ok

2025-03-04 下午 02:45 ACQUA 6.1.110

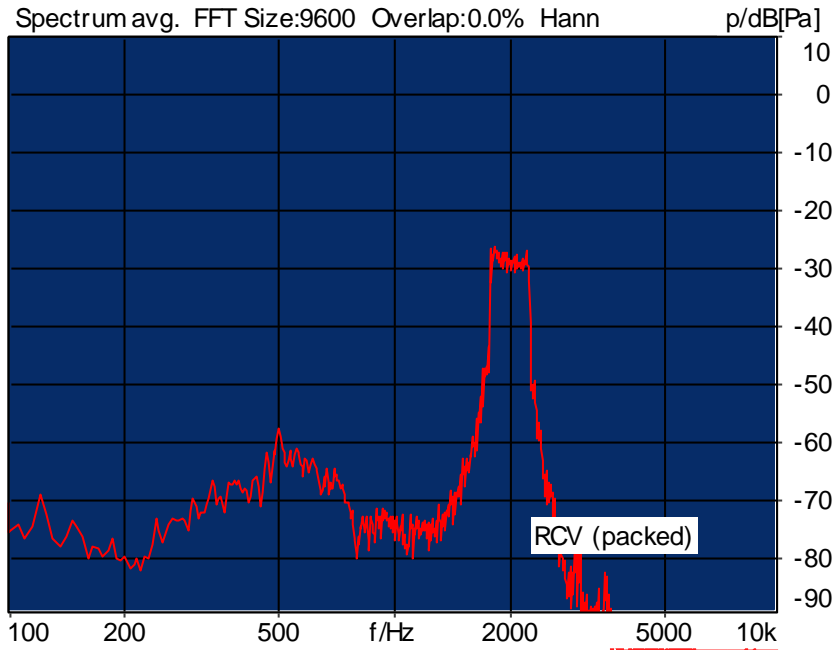
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz 8N NB

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



Distortion (Noise) RCV (packed): 25.13 dB (5.54%) Ok

Ok

2025-03-04 下午 02:46 ACQUA 6.1.110

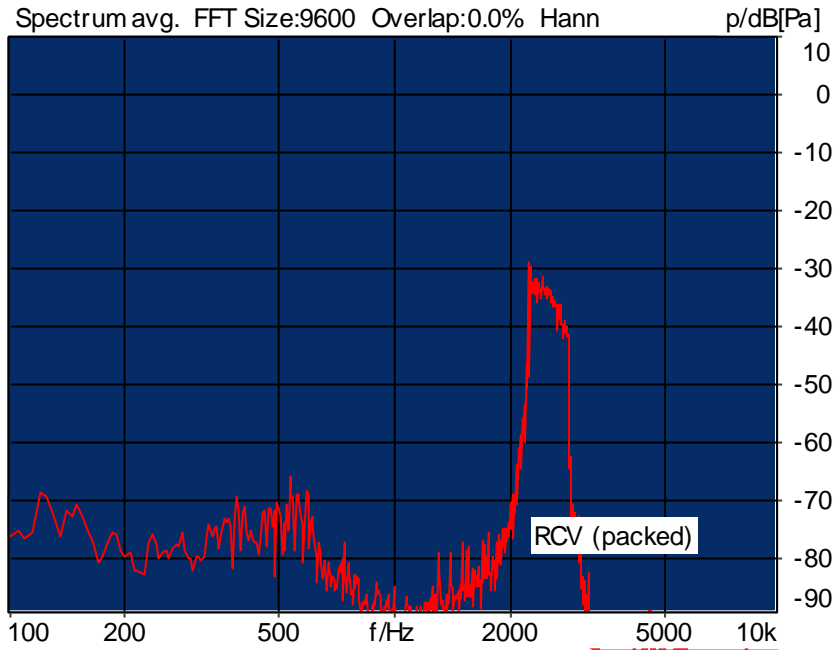
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz 8N NB

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



Distortion (Noise) RCV (packed): 26.15 dB (4.92%) Ok

Ok

2025-03-04 下午 02:46 ACQUA 6.1.110

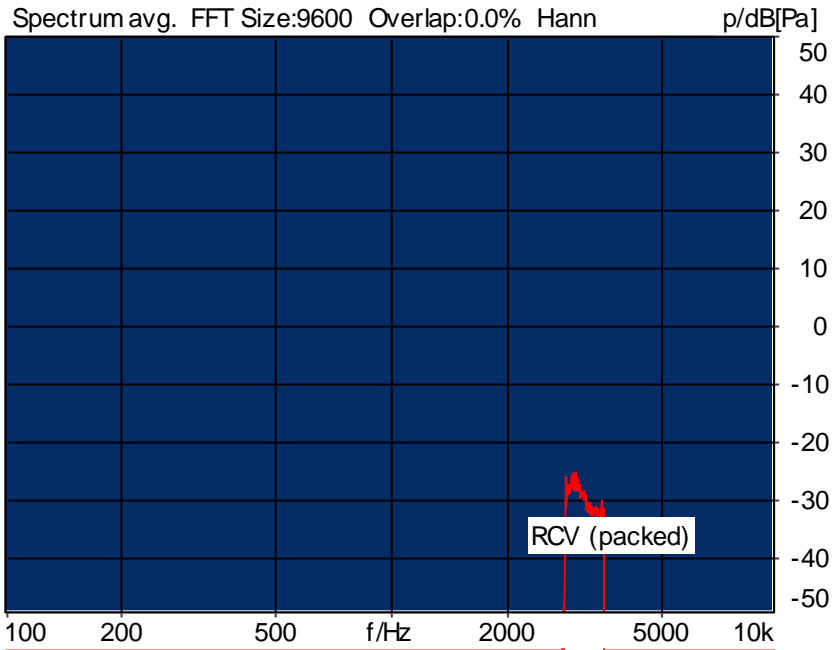
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz 8N NB

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



Distortion (Noise) RCV (packed): 41.57 dB (0.83%) Ok

Ok

2025-03-04 下午 02:47 ACQUA 6.1.110

Limits

lower
20.00 dB



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

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

Region	Frequency	SDNR
1	400Hz	31.25 dB
2	500Hz	29.00 dB
3	630Hz	24.84 dB
4	800Hz	25.97 dB
5	1000Hz	21.31 dB
6	1250Hz	20.91 dB
7	1600Hz	26.52 dB
8	2000Hz	25.13 dB
9	2500Hz	26.15 dB
10	3150Hz	41.57 dB

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

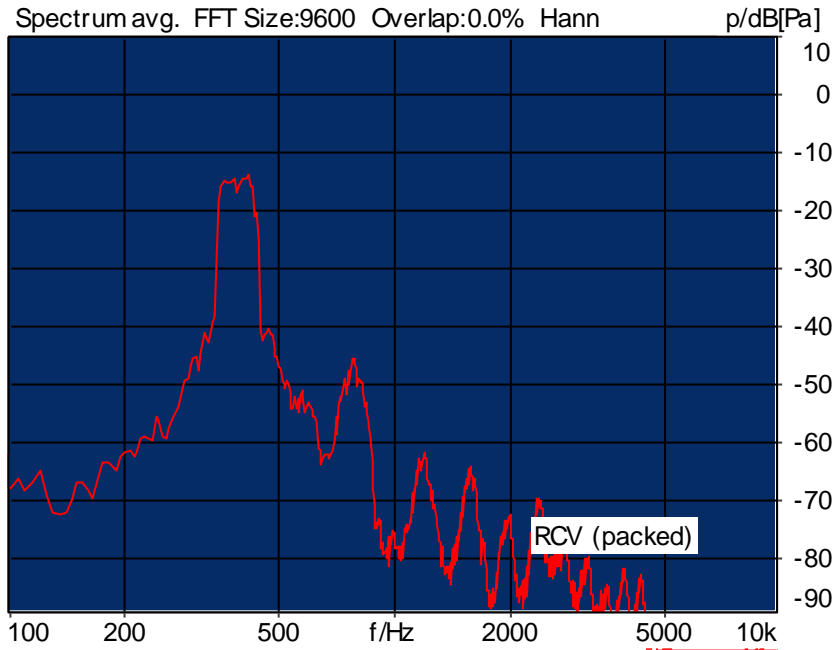
Smallest SDNR was 20.91dB at 1250Hz.

2025-03-04 下午 02:47 ACQUA



5.2 RCV Distortion and Noise - 400 Hz 2N NB

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



Distortion (Noise) RCV (packed): 30.51 dB (2.98%) Ok

Ok

2025-03-04 下午 02:49 ACQUA 6.1.110

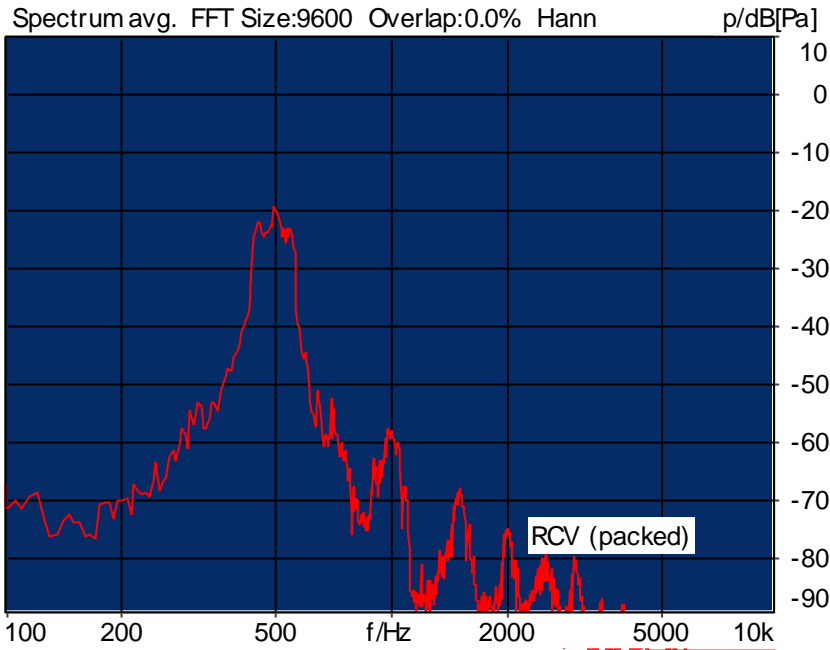
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 500 Hz 2N NB

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



Distortion (Noise) RCV (packed): 28.58 dB (3.72%) Ok

Ok

2025-03-04 下午 02:50 ACQUA 6.1.110

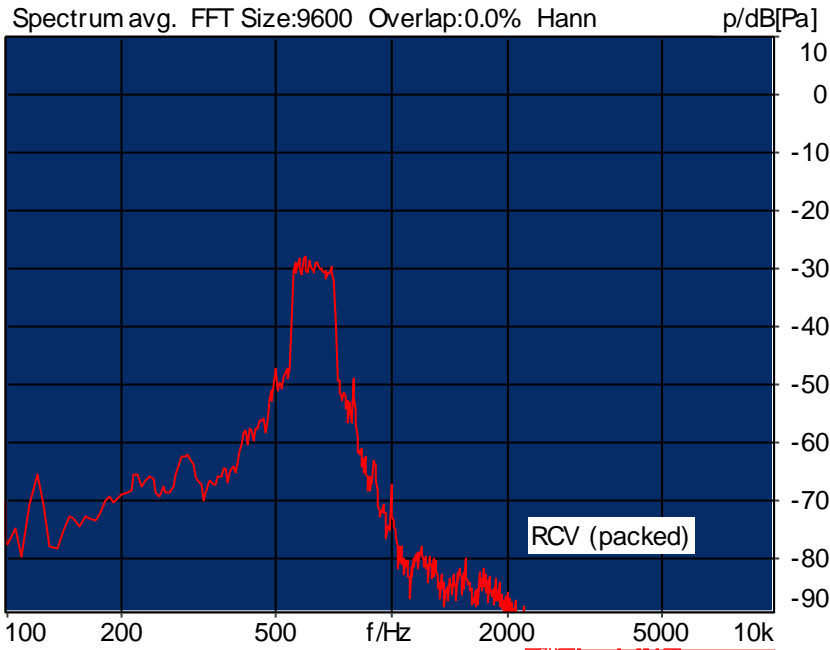
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 630 Hz 2N NB

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



Distortion (Noise) RCV (packed): 24.89 dB (5.70%) Ok

Ok

2025-03-04 下午 02:50 ACQUA 6.1.110

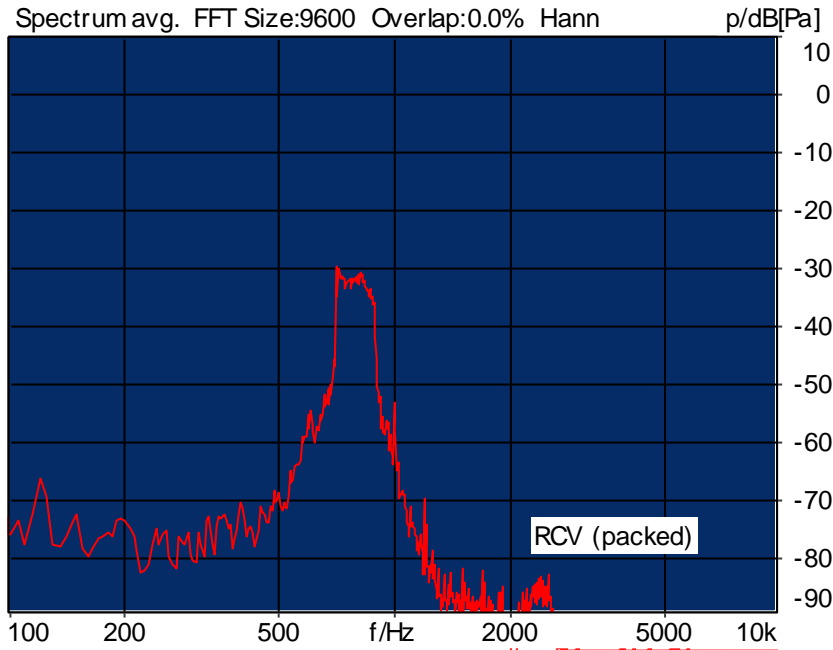
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 800 Hz 2N NB

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



Distortion (Noise) RCV (packed): 25.48 dB (5.32%) Ok

Ok

2025-03-04 下午 02:51 ACQUA 6.1.110

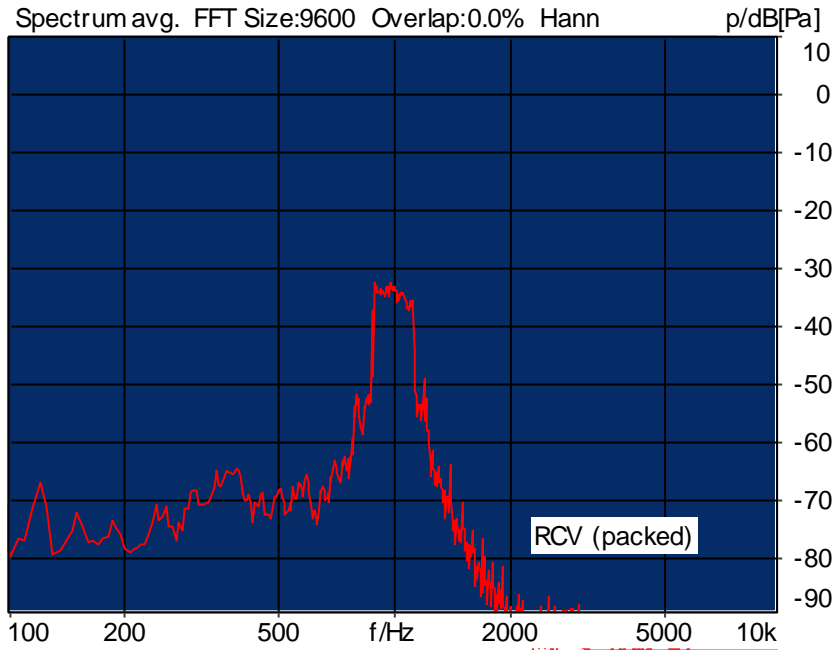
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz 2N NB

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



Distortion (Noise) RCV (packed): 21.58 dB (8.34%) Ok

Ok

2025-03-04 下午 02:51 ACQUA 6.1.110

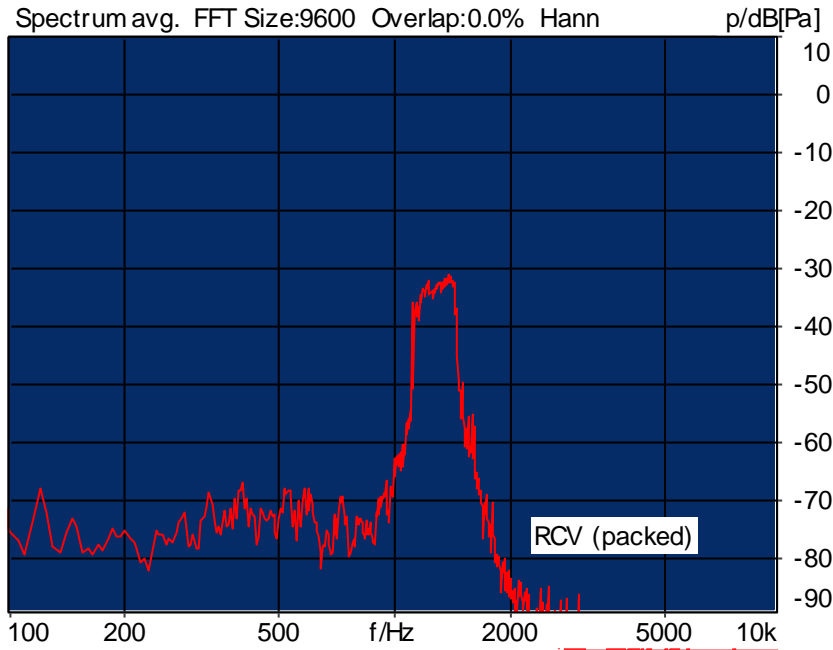
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz 2N NB

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



Distortion (Noise) RCV (packed): 22.04 dB (7.90%) Ok

Ok

2025-03-04 下午 02:52 ACQUA 6.1.110

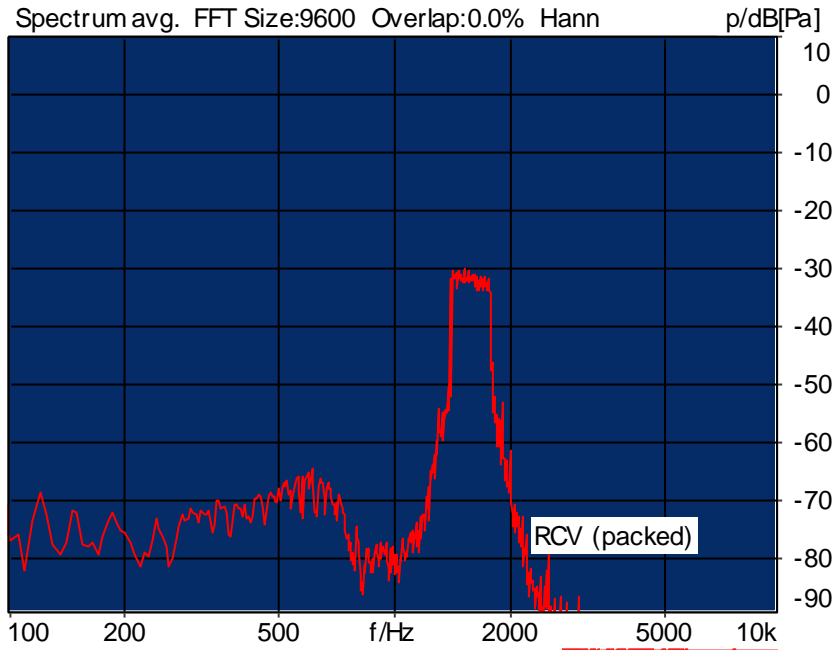
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz 2N NB

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



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

Ok

2025-03-04 下午 02:53 ACQUA 6.1.110

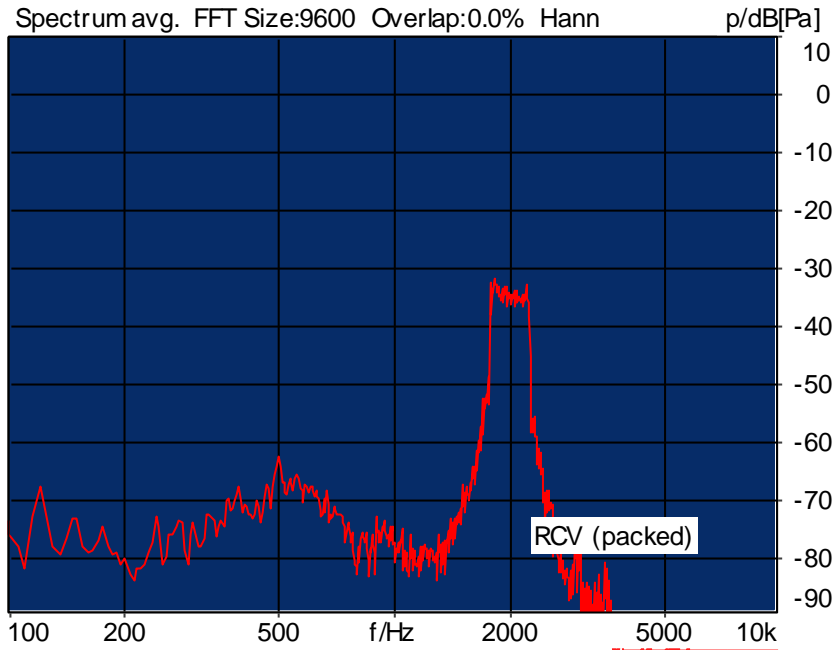
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz 2N NB

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



Distortion (Noise) RCV (packed): 24.30 dB (6.10%) Ok

Ok

2025-03-04 下午 02:53 ACQUA 6.1.110

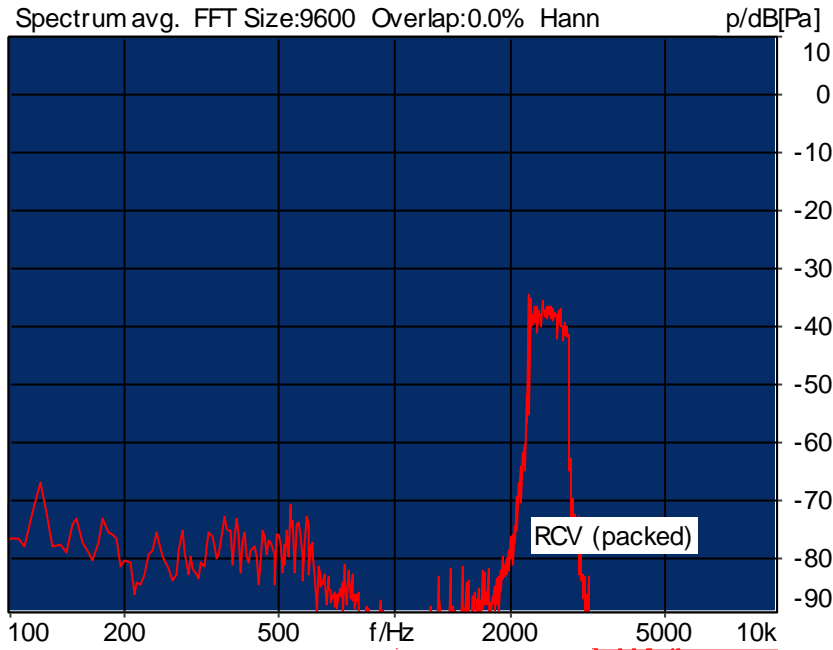
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz 2N NB

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



Distortion (Noise) RCV (packed): 28.21 dB (3.88%) Ok

Ok

2025-03-04 下午 02:54 ACQUA 6.1.110

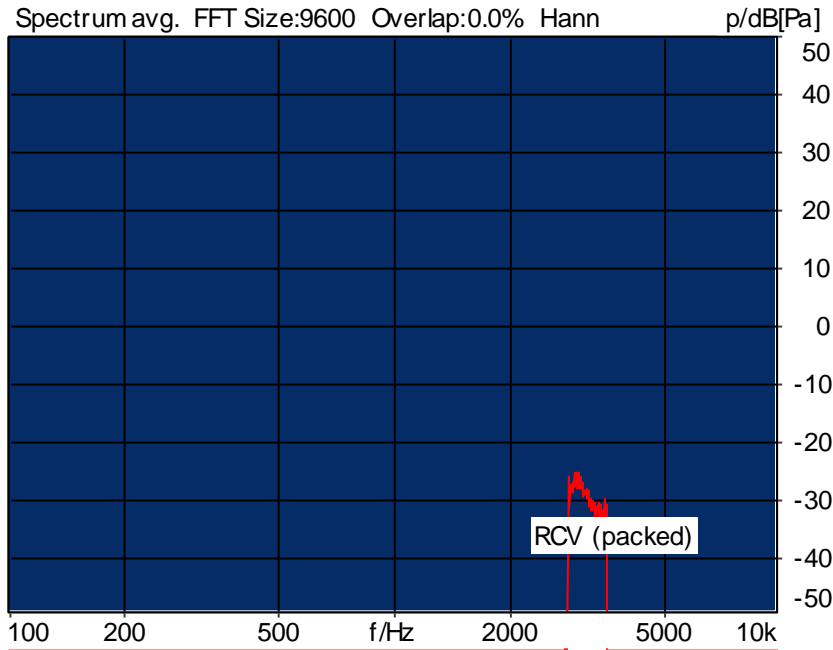
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz 2N NB

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



Distortion (Noise) RCV (packed): 44.03 dB (0.63%) Ok

Ok

2025-03-04 下午 02:54 ACQUA 6.1.110

Limits

lower
20.00 dB



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

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

Region	Frequency	SDNR
1	400Hz	30.51 dB
2	500Hz	28.58 dB
3	630Hz	24.89 dB
4	800Hz	25.48 dB
5	1000Hz	21.58 dB
6	1250Hz	22.04 dB
7	1600Hz	26.27 dB
8	2000Hz	24.30 dB
9	2500Hz	28.21 dB
10	3150Hz	44.03 dB

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

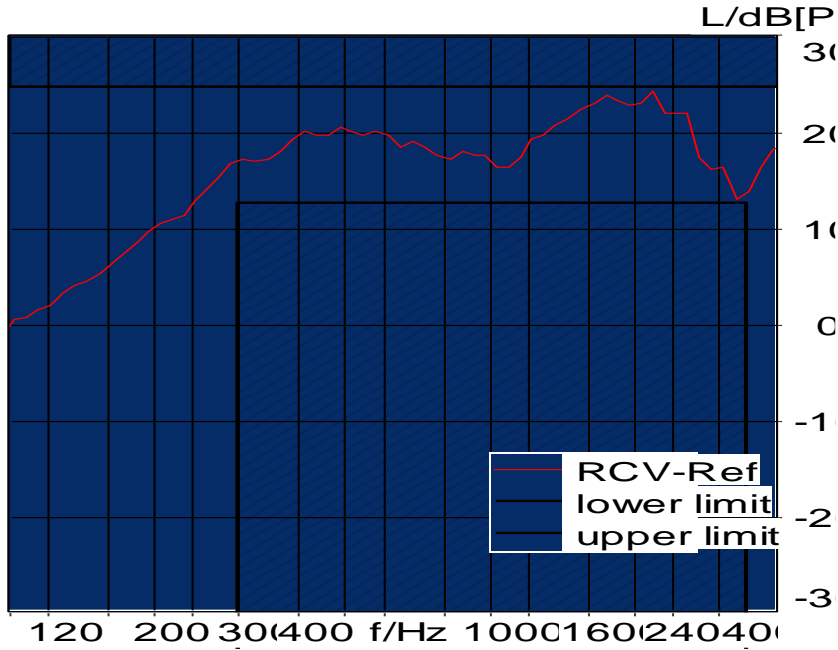
Smallest SDNR was 21.58dB at 1000Hz.

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5.3 Frequency Response 8N DF HANB

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



Absolute minimal distance

0.34 dB at 3245.6 Hz Ok

Ok

2025-03-04 下午 02:48 ACQUA 6.1.110

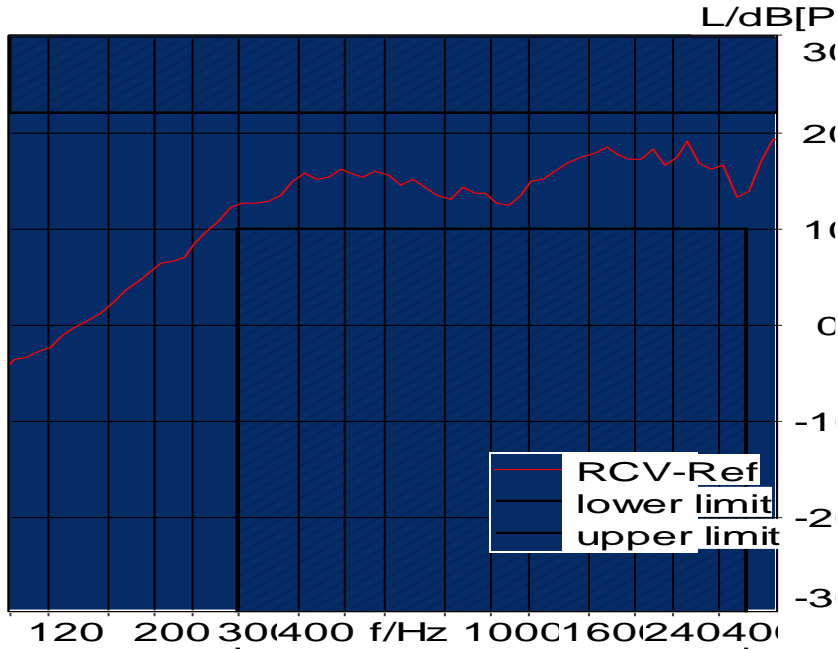
Limits

lower
Fit into tolerance



5.3 Frequency Response 2N DF HANB

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



Absolute minimal distance

2.64 dB at 3882.4 Hz Ok

Ok

2025-03-04 下午 02:55 ACQUA 6.1.110

Limits

lower
Fit into tolerance



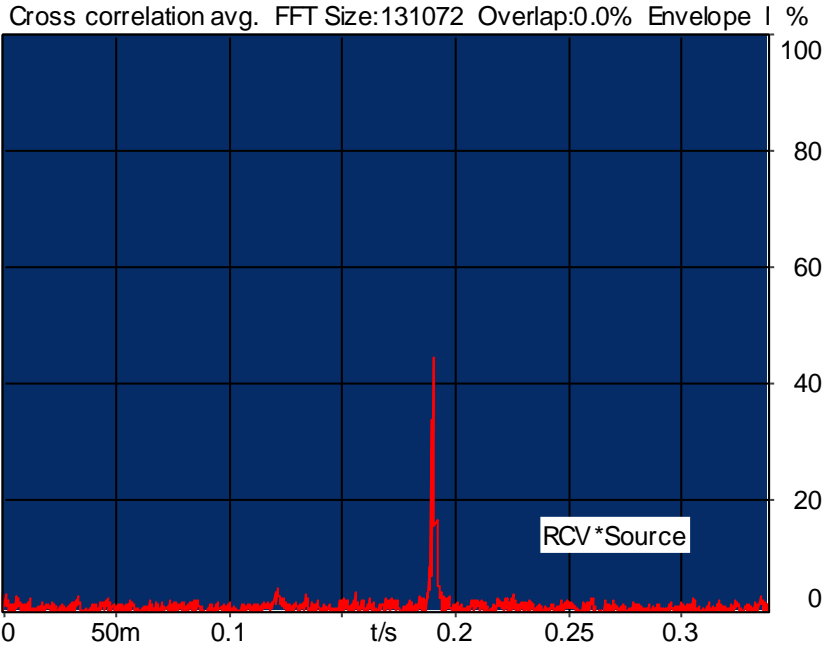
#2 NR n12 EVS WB 24.4kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	190.8
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	90.20
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	88.81
5.2 RCV Distortion and Noise - 250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.49
5.2 RCV Distortion and Noise - 315 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.52
5.2 RCV Distortion and Noise - 400 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.14
5.2 RCV Distortion and Noise - 500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.83
5.2 RCV Distortion and Noise - 630 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.94
5.2 RCV Distortion and Noise - 800 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.55
5.2 RCV Distortion and Noise - 1000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.42
5.2 RCV Distortion and Noise - 1250 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.46
5.2 RCV Distortion and Noise - 1600 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.26
5.2 RCV Distortion and Noise - 2000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.39
5.2 RCV Distortion and Noise - 2500 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.88
5.2 RCV Distortion and Noise - 3150 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.46
5.2 RCV Distortion and Noise - 4000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.27
5.2 RCV Distortion and Noise - 5000 Hz 8N WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.83
Report - Receive Distortion and Noise (Conversational Gain) 8N WB	Ok	Minimum SDNR [dB], (occured at 2000Hz)	21.39
5.2 RCV Distortion and Noise - 250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.51
5.2 RCV Distortion and Noise - 315 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.06
5.2 RCV Distortion and Noise - 400 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.26
5.2 RCV Distortion and Noise - 500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.65
5.2 RCV Distortion and Noise - 630 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.25
5.2 RCV Distortion and Noise - 800 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.51
5.2 RCV Distortion and Noise - 1000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.88
5.2 RCV Distortion and Noise - 1250 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.77
5.2 RCV Distortion and Noise - 1600 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.70
5.2 RCV Distortion and Noise - 2000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.44
5.2 RCV Distortion and Noise - 2500 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.42
5.2 RCV Distortion and Noise - 3150 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.26
5.2 RCV Distortion and Noise - 4000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.70
5.2 RCV Distortion and Noise - 5000 Hz 2N WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.36
Report - Receive Distortion and Noise (Conversational Gain) 2N WB	Ok	Minimum SDNR [dB], (occured at 250Hz)	20.51
5.3 Frequency Response 8N DF	Ok	Min. dist. to tolerance scheme [dB], 576.7 Hz	1.08
5.3 Frequency Response 2N DF	Ok	Min. dist. to tolerance scheme [dB], 230.2 Hz	2.74



Overall Receive Delay WB

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



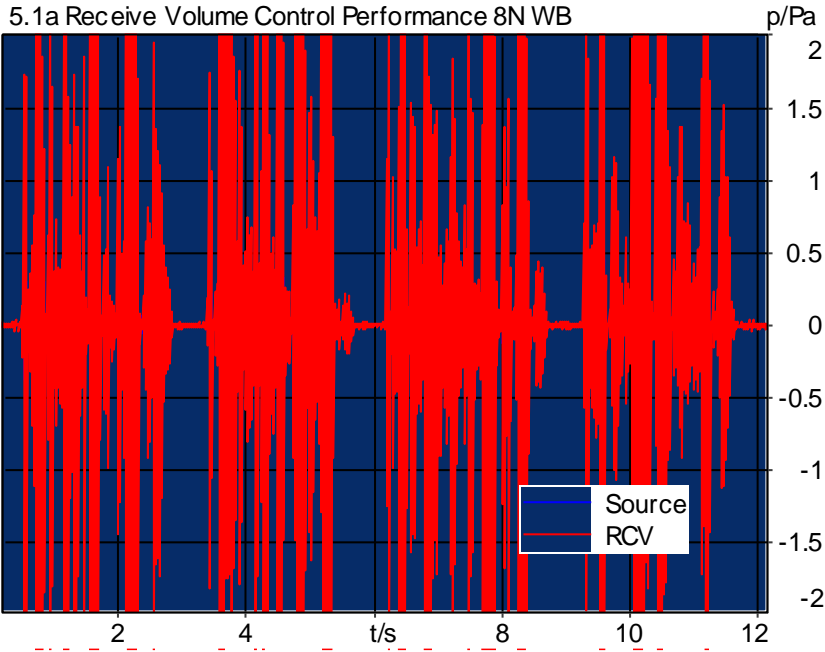
Channel	Delay	Correlation
RCV*Source	190.8 ms	44.47 %

2025-02-28 上午 06:40 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	90.20 dB[SPL]	59.39%	Ok

Ok

2025-02-28 上午 06:40 ACQUA 6.1.110

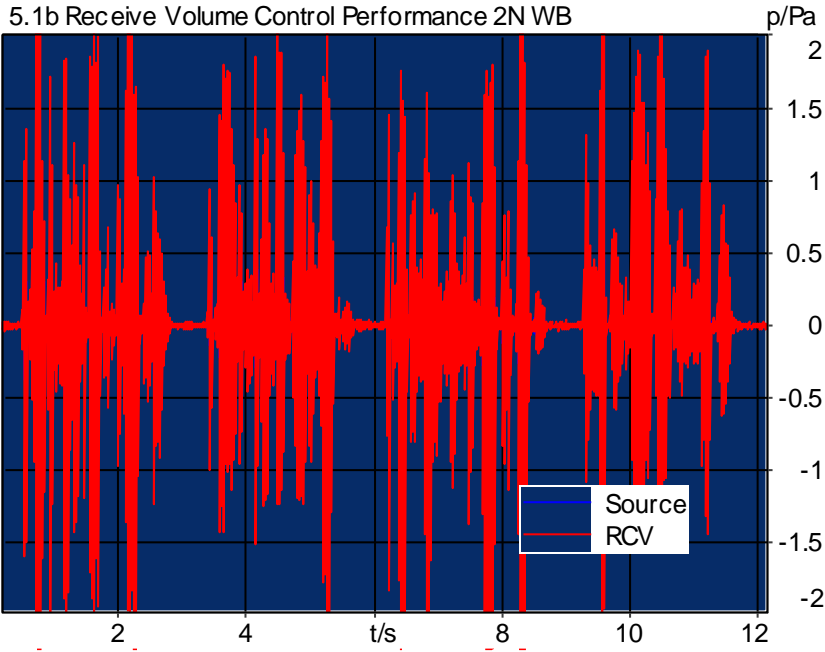
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	88.81 dB[SPL]	28.04%	Ok

Ok

2025-02-28 上午 06:53 ACQUA 6.1.110

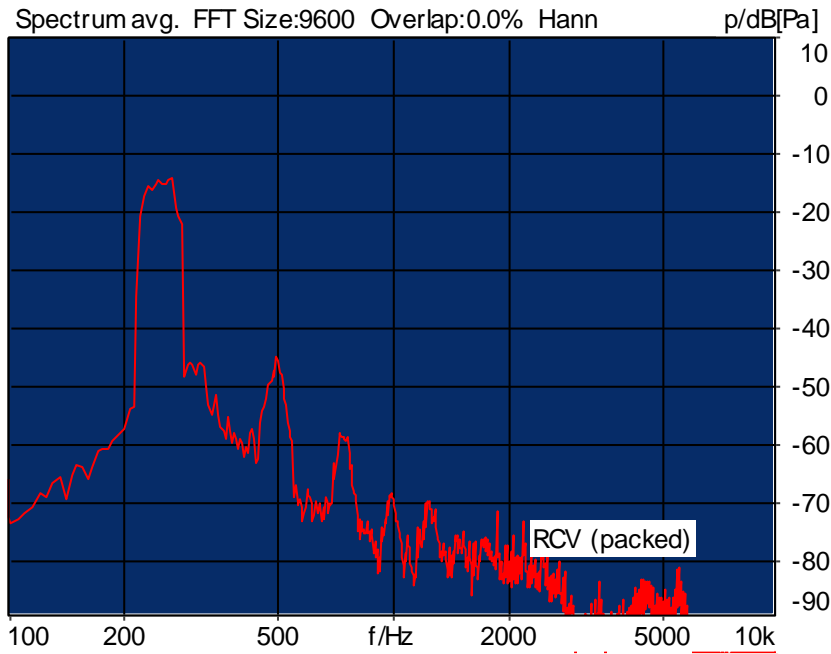
Limits

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): 33.49 dB (2.12%) Ok

Ok

2025-02-28 上午 06:41 ACQUA 6.1.110

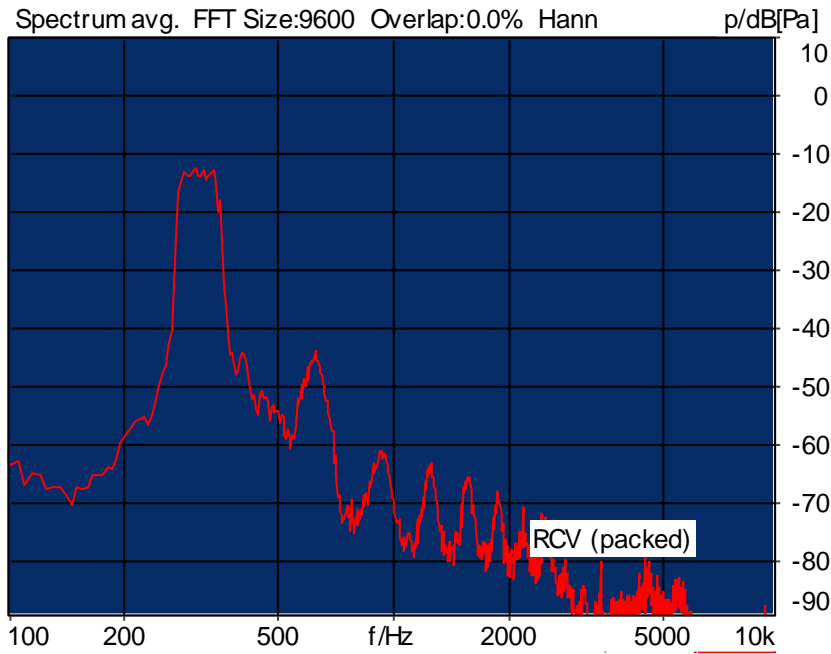
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 315 Hz 8N WB

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



Distortion (Noise) RCV (packed): 32.52 dB (2.37%) Ok

Ok

2025-02-28 上午 06:41 ACQUA 6.1.110

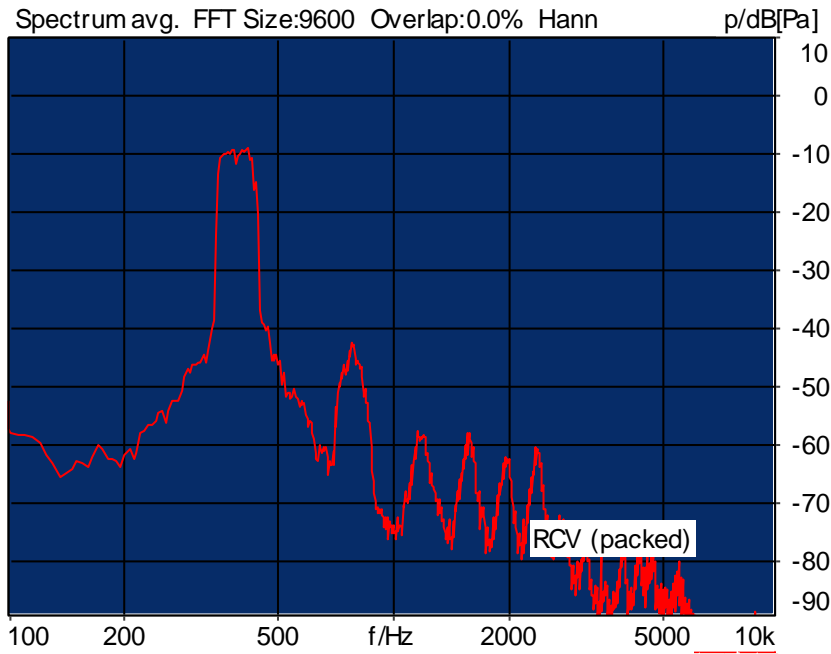
Limits

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): 33.14 dB (2.20%) Ok

Ok

2025-02-28 上午 06:42 ACQUA 6.1.110

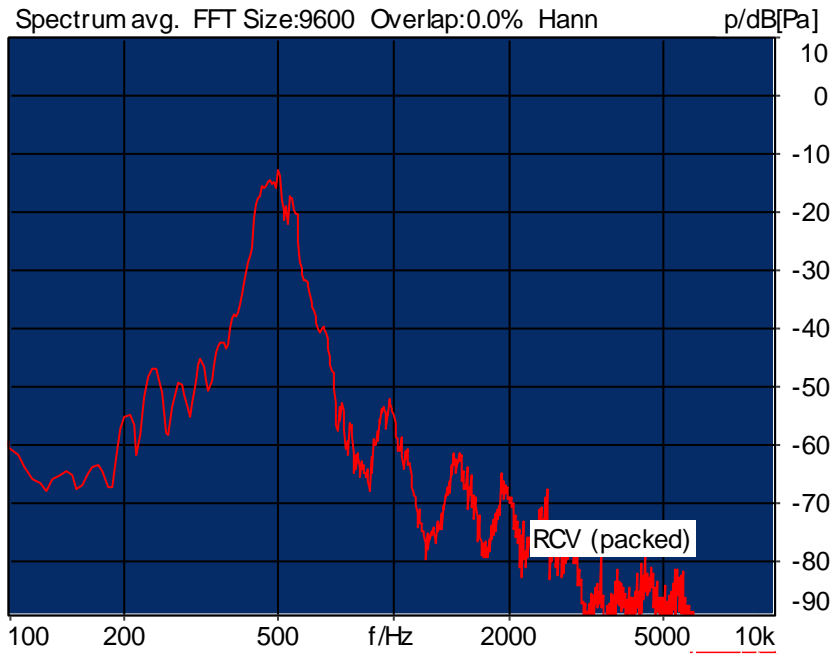
Limits

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): 23.83 dB (6.44%) Ok

Ok

2025-02-28 上午 06:43 ACQUA 6.1.110

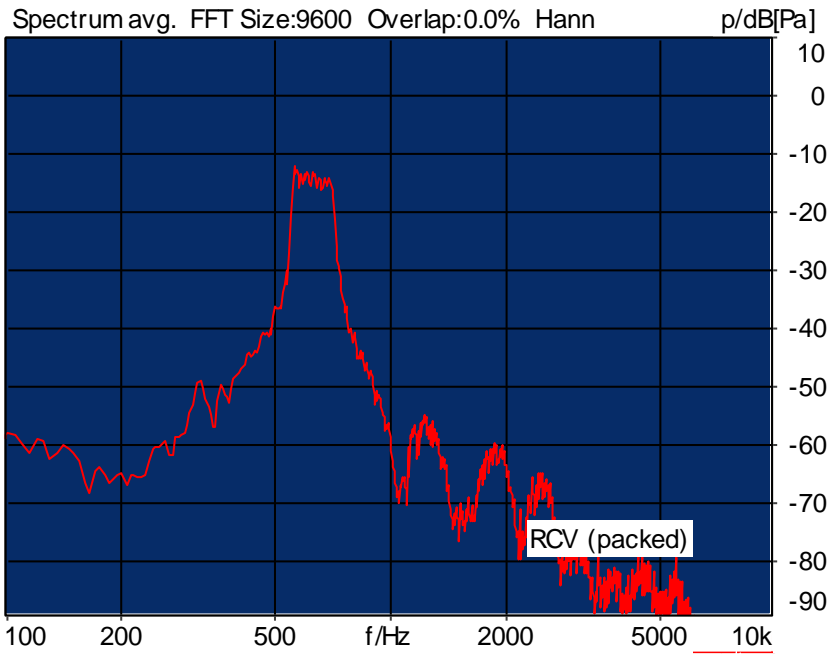
Limits

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): 25.94 dB (5.05%) Ok

Ok

2025-02-28 上午 06:43 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): 35.55 dB (1.67%) Ok

Ok

2025-02-28 上午 06:44 ACQUA 6.1.110

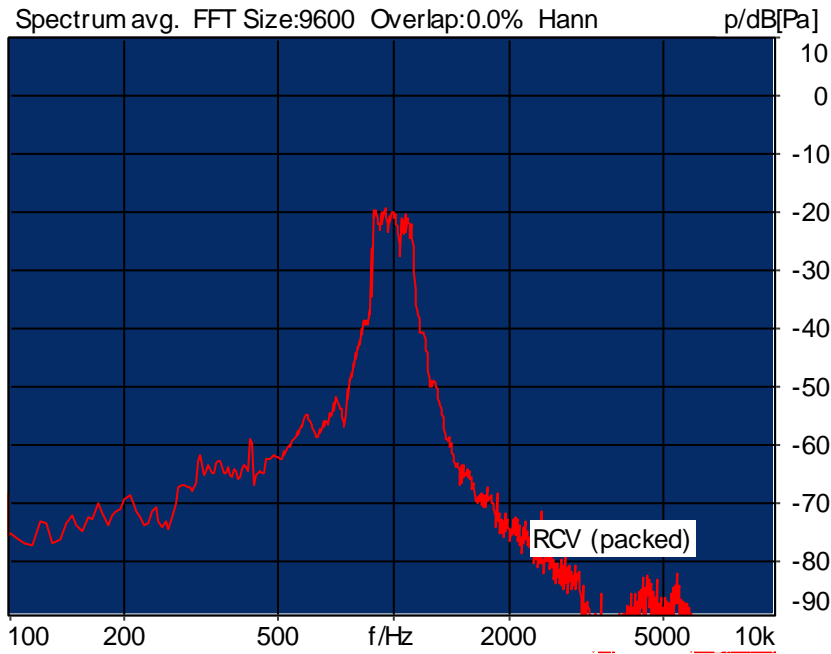
Limits

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): 21.42 dB (8.50%) Ok

Ok

2025-02-28 上午 06:44 ACQUA 6.1.110

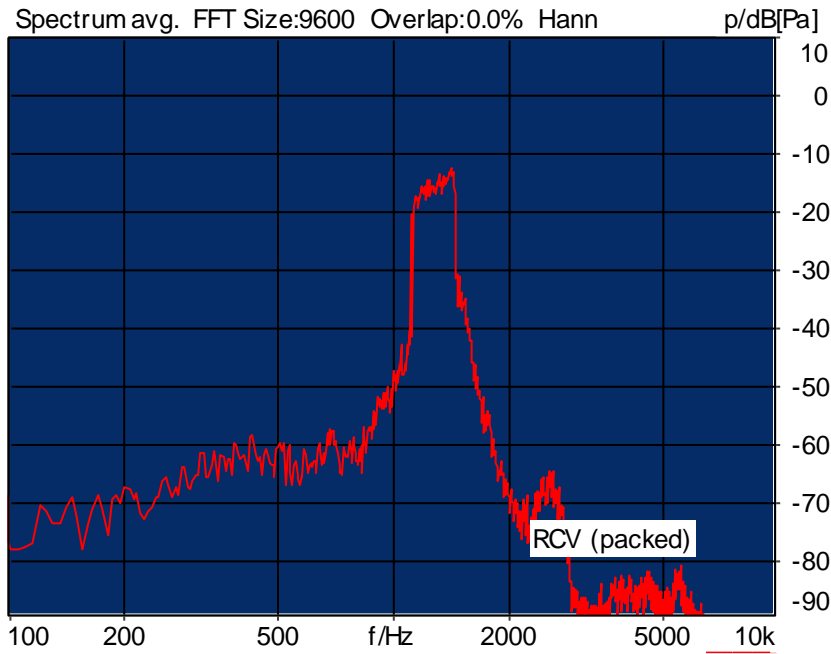
Limits

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): 22.46 dB (7.54%) Ok

Ok

2025-02-28 上午 06:45 ACQUA 6.1.110

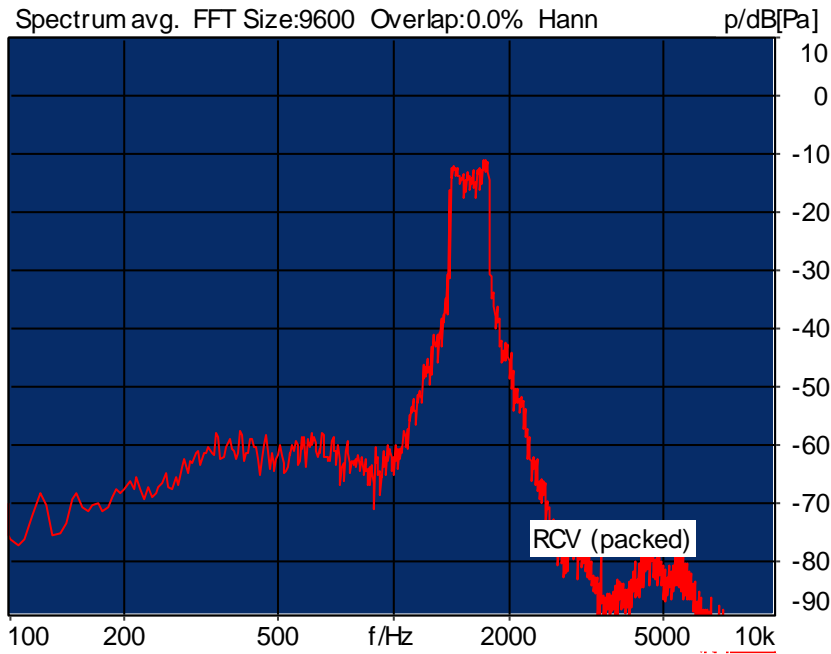
Limits

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): 26.26 dB (4.86%) Ok

Ok

2025-02-28 上午 06:46 ACQUA 6.1.110

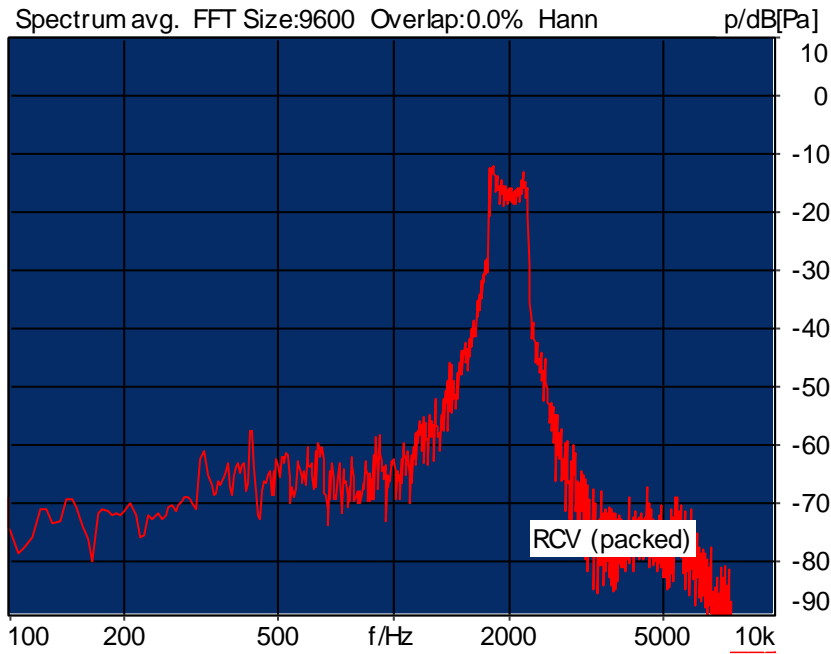
Limits

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): 21.39 dB (8.52%) Ok

Ok

2025-02-28 上午 06:49 ACQUA 6.1.110

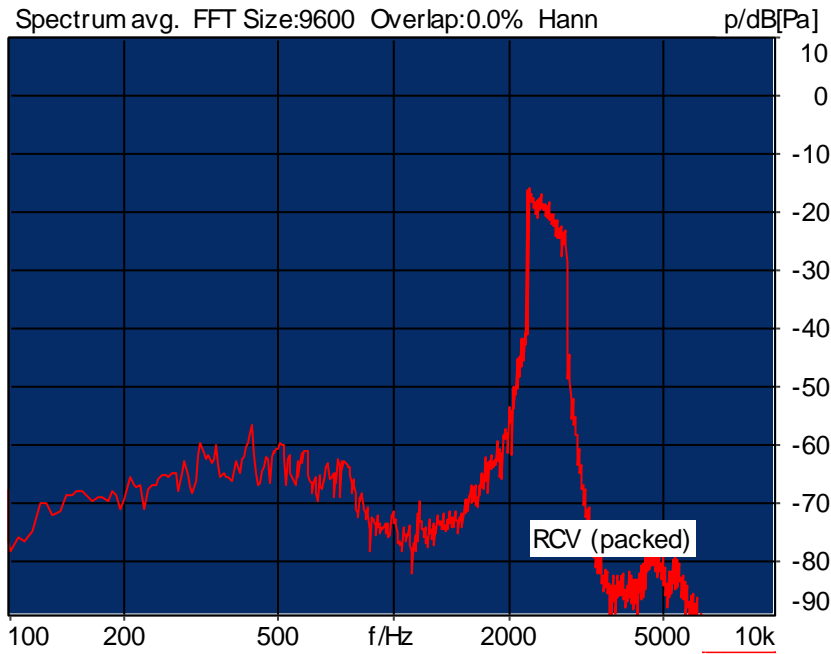
Limits

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): 28.88 dB (3.60%) Ok

Ok

2025-02-28 上午 06:47 ACQUA 6.1.110

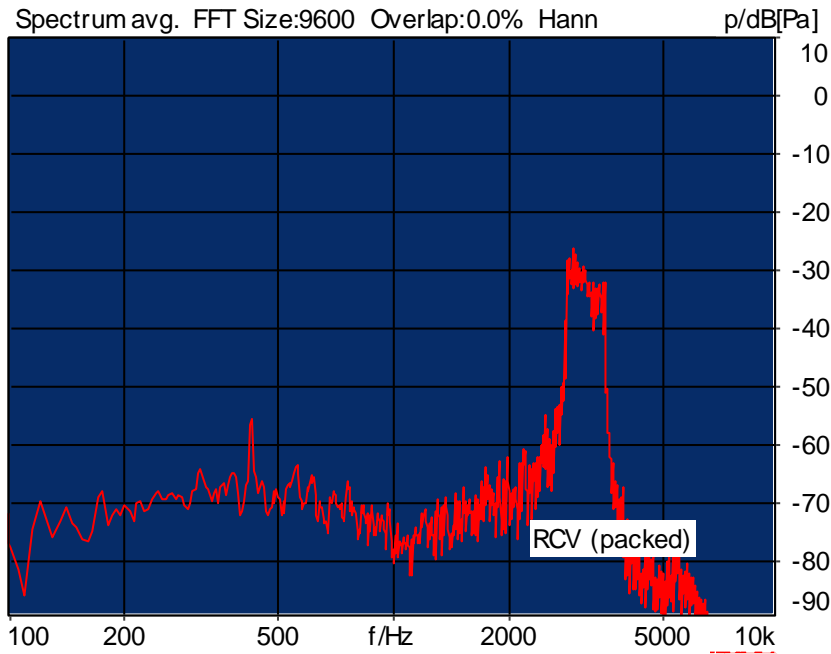
Limits

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): 24.46 dB (5.98%) Ok

Ok

2025-02-28 上午 06:49 ACQUA 6.1.110

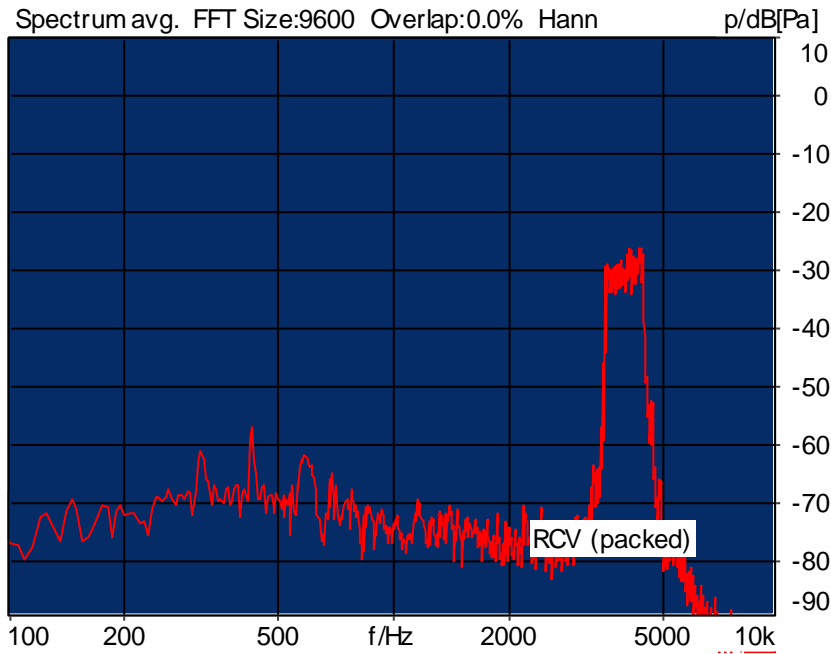
Limits

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): 26.27 dB (4.86%) Ok

Ok

2025-02-28 上午 06:48 ACQUA 6.1.110

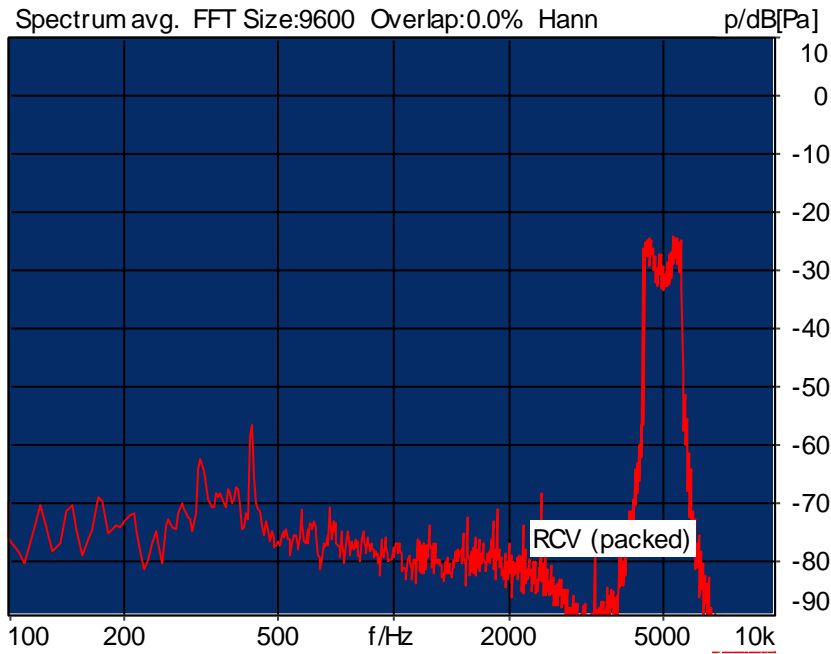
Limits

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): 33.83 dB (2.03%) Ok

Ok

2025-02-28 上午 06:50 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	33.49 dB
2	315Hz	32.52 dB
3	400Hz	33.14 dB
4	500Hz	23.83 dB
5	630Hz	25.94 dB
6	800Hz	35.55 dB
7	1000Hz	21.42 dB
8	1250Hz	22.46 dB
9	1600Hz	26.26 dB
10	2500Hz	28.88 dB
11	4000Hz	26.27 dB
12	2000Hz	21.39 dB
13	3150Hz	24.46 dB
14	5000Hz	33.83 dB

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

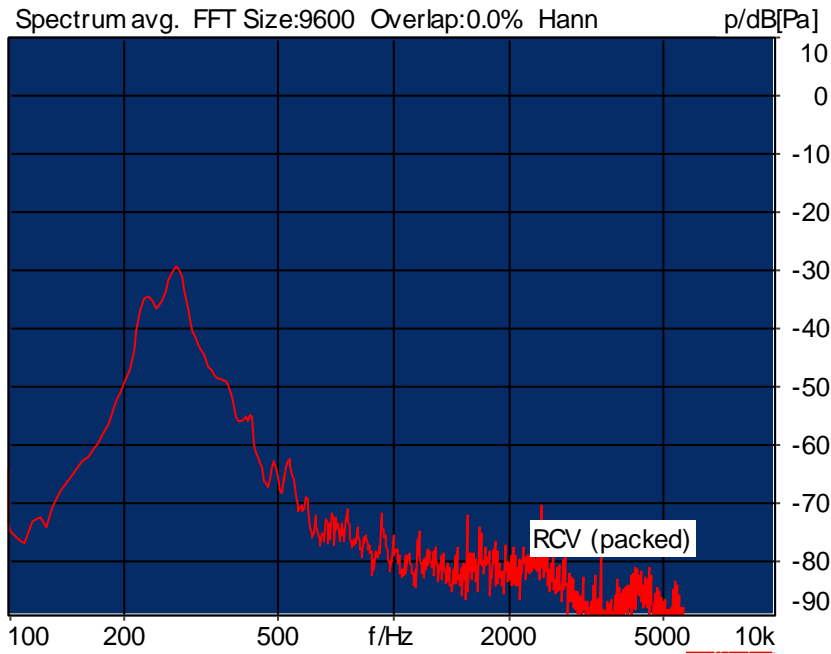
Smallest SDNR was 21.39dB at 2000Hz.

2025-02-28 上午 06:50 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): 20.51 dB (9.66%) Ok

Ok

2025-02-28 上午 06:53 ACQUA 6.1.110

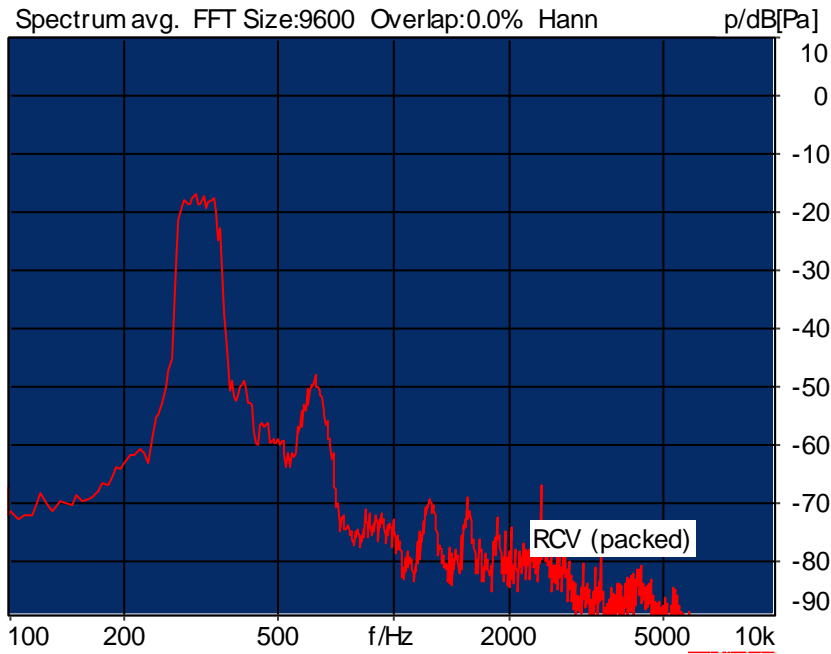
Limits

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): 32.06 dB (2.50%) Ok

Ok

2025-02-28 上午 06:54 ACQUA 6.1.110

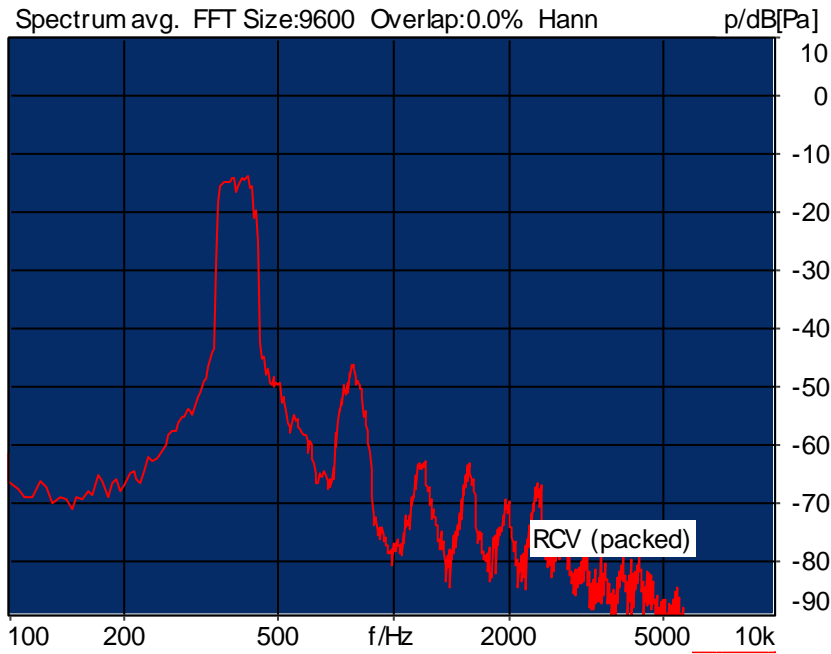
Limits

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): 32.26 dB (2.44%) Ok

Ok

2025-02-28 上午 06:54 ACQUA 6.1.110

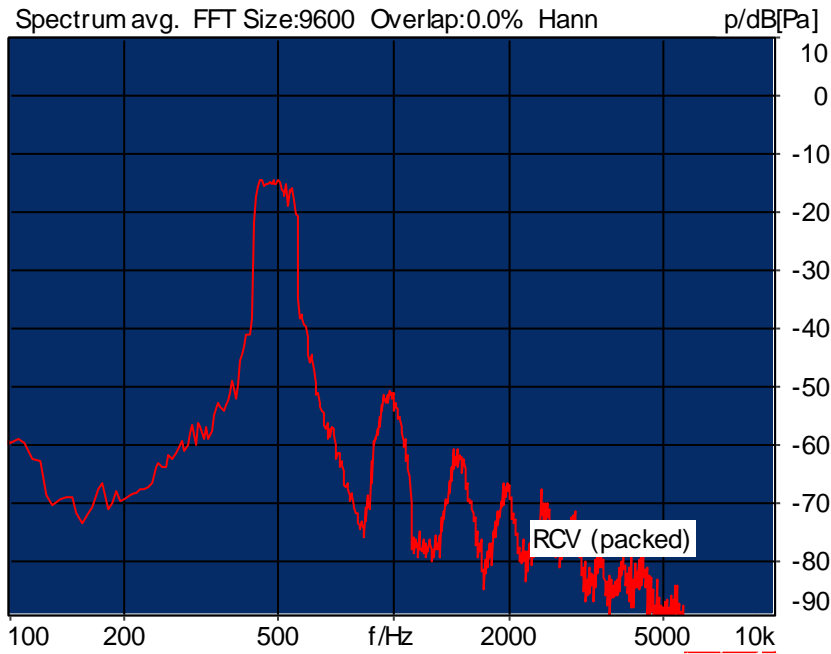
Limits

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): 32.65 dB (2.33%) Ok

Ok

2025-02-28 上午 06:55 ACQUA 6.1.110

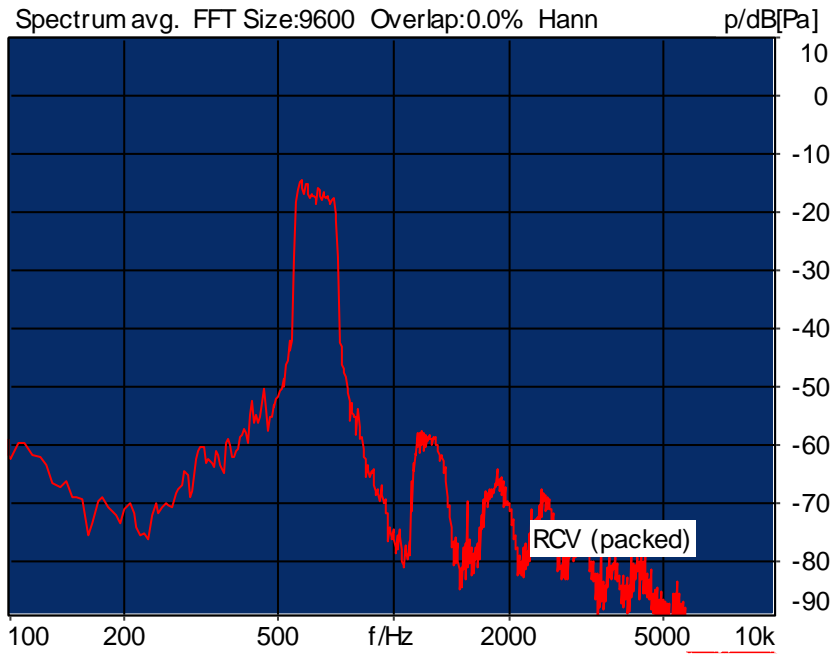
Limits

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): 35.25 dB (1.73%) Ok

Ok

2025-02-28 上午 06:56 ACQUA 6.1.110

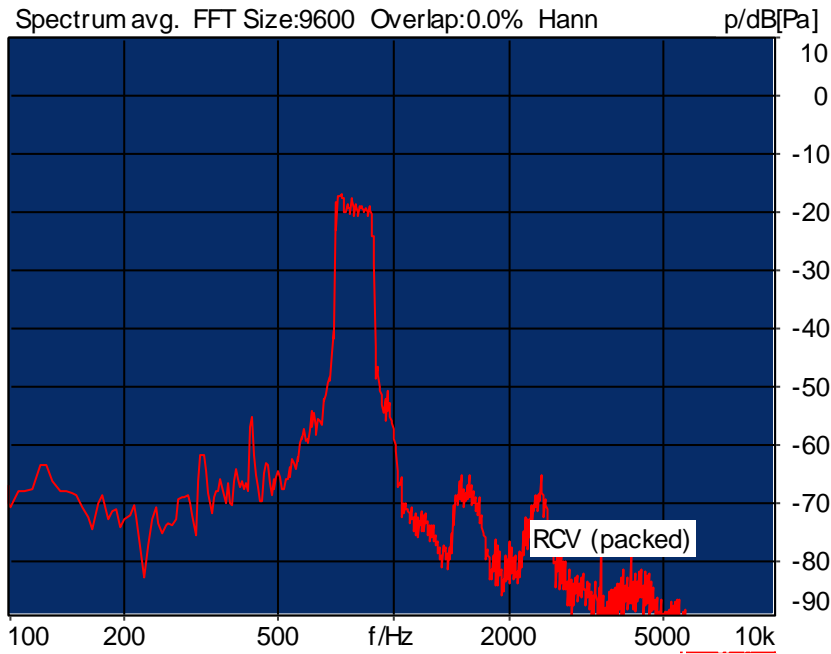
Limits

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): 35.51 dB (1.68%) Ok

Ok

2025-02-28 上午 06:56 ACQUA 6.1.110

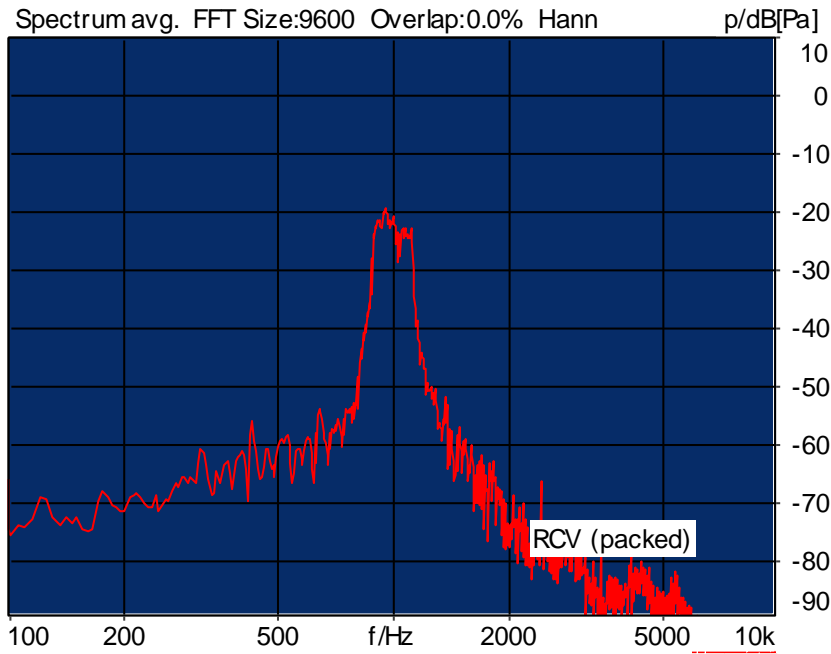
Limits

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): 23.88 dB (6.40%) Ok

Ok

2025-02-28 上午 06:57 ACQUA 6.1.110

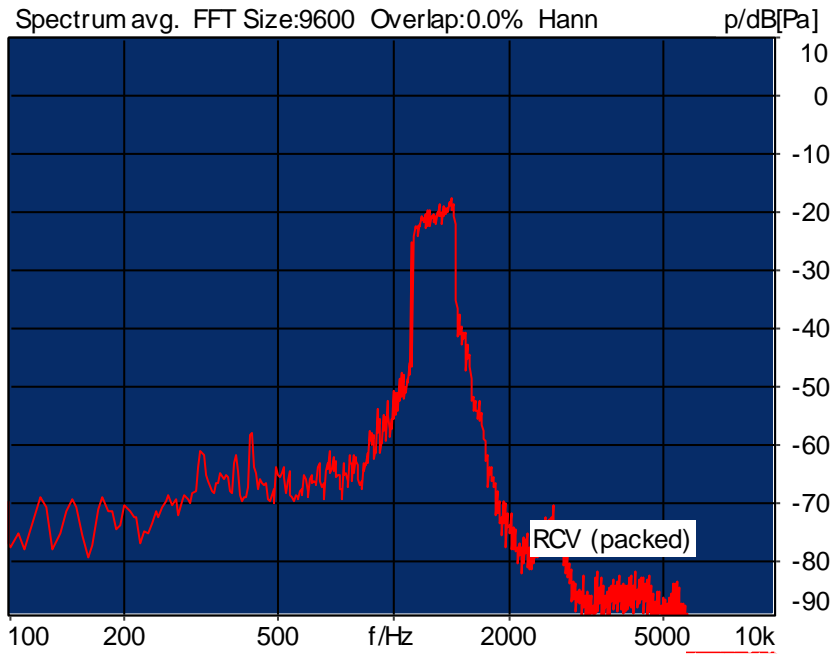
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz 2N WB

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



Distortion (Noise) RCV (packed): 22.77 dB (7.27%) Ok

Ok

2025-02-28 上午 06:57 ACQUA 6.1.110

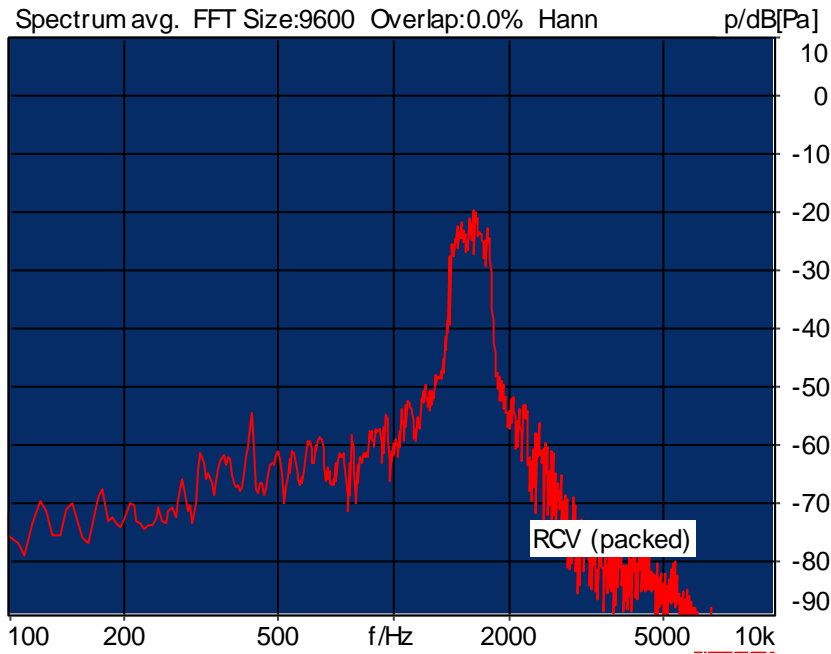
Limits

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): 22.70 dB (7.33%) Ok

Ok

2025-02-28 上午 06:58 ACQUA 6.1.110

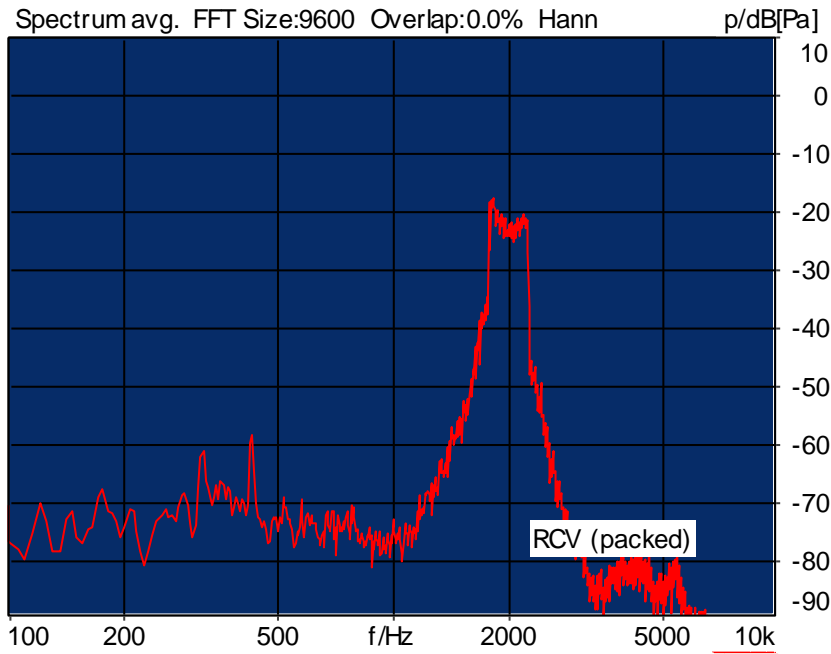
Limits

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): 22.44 dB (7.55%) Ok

Ok

2025-02-28 上午 06:59 ACQUA 6.1.110

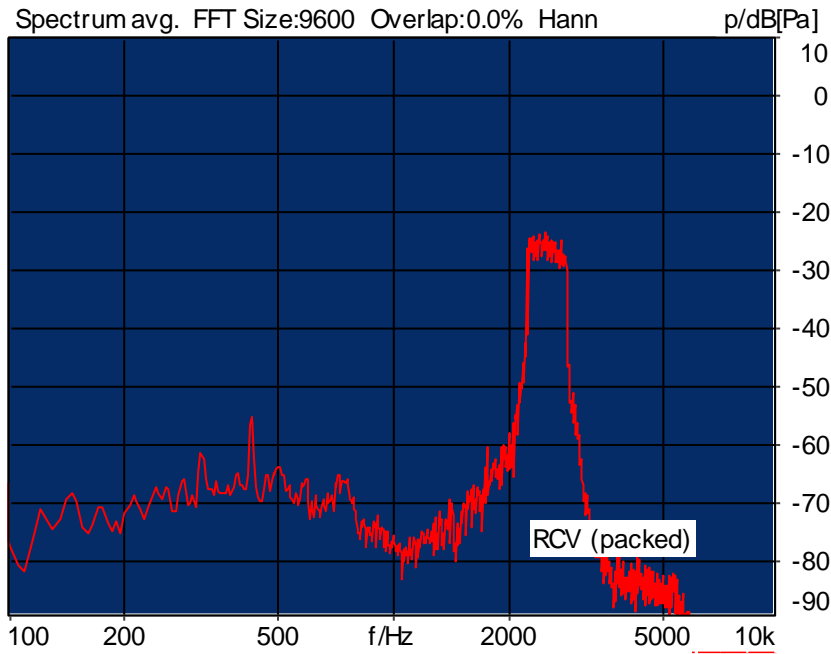
Limits

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): 26.42 dB (4.77%) Ok

Ok

2025-02-28 上午 06:59 ACQUA 6.1.110

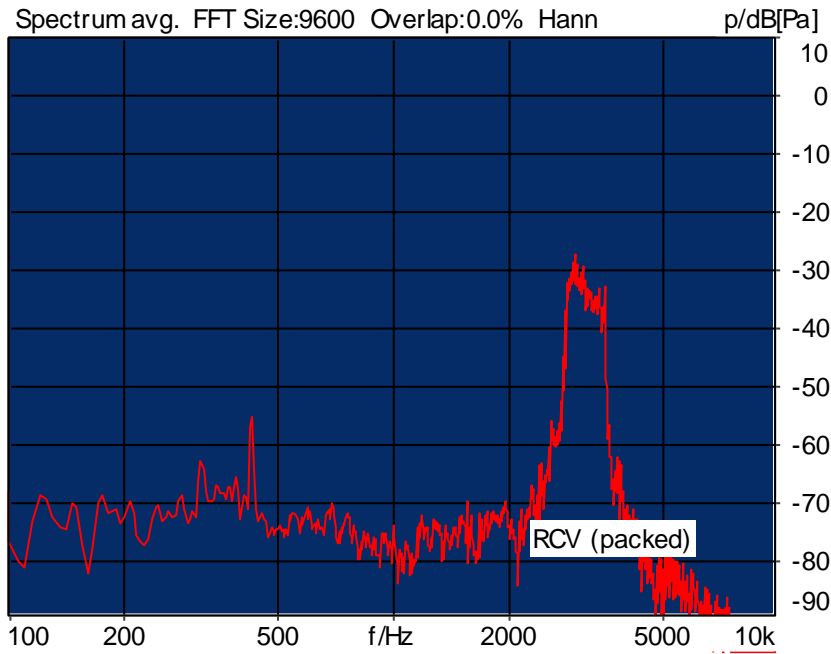
Limits

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): 23.26 dB (6.87%) Ok

Ok

2025-02-28 上午 07:00 ACQUA 6.1.110

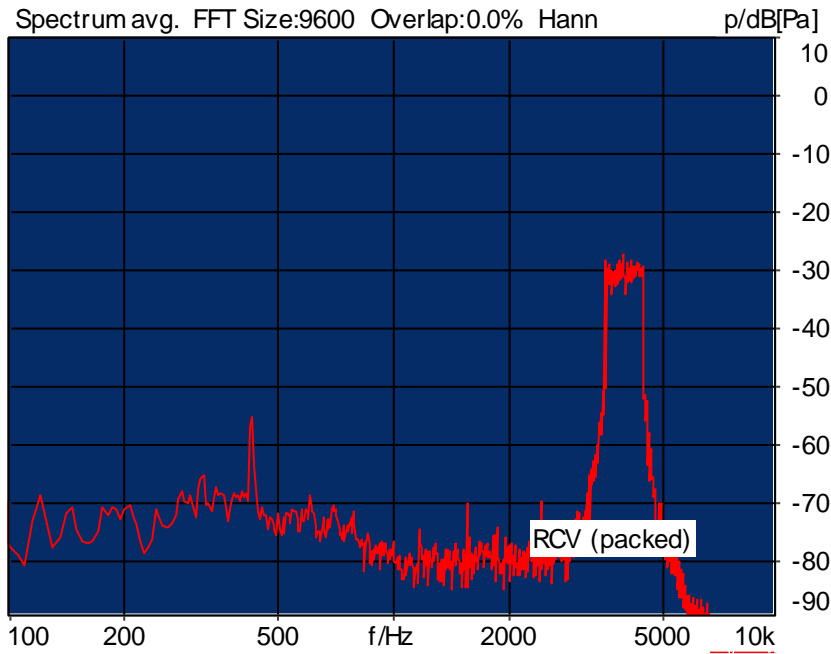
Limits

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): 28.70 dB (3.67%) Ok

Ok

2025-02-28 上午 07:00 ACQUA 6.1.110

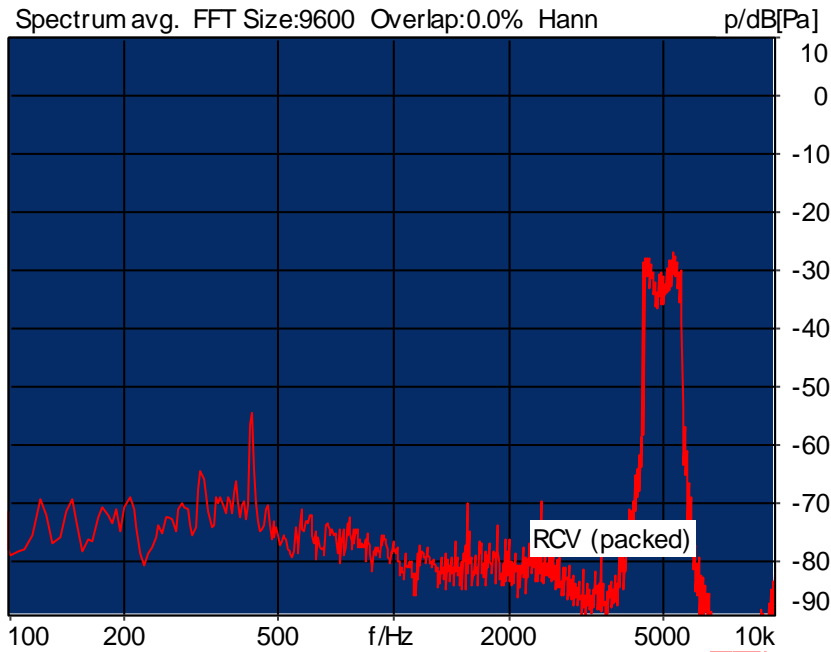
Limits

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): 34.36 dB (1.91%) Ok

Ok

2025-02-28 上午 07:01 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	20.51 dB
2	315Hz	32.06 dB
3	400Hz	32.26 dB
4	500Hz	32.65 dB
5	630Hz	35.25 dB
6	800Hz	35.51 dB
7	1000Hz	23.88 dB
8	1250Hz	22.77 dB
9	1600Hz	22.70 dB
10	2000Hz	22.44 dB
11	2500Hz	26.42 dB
12	3150Hz	23.26 dB
13	4000Hz	28.70 dB
14	5000Hz	34.36 dB

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

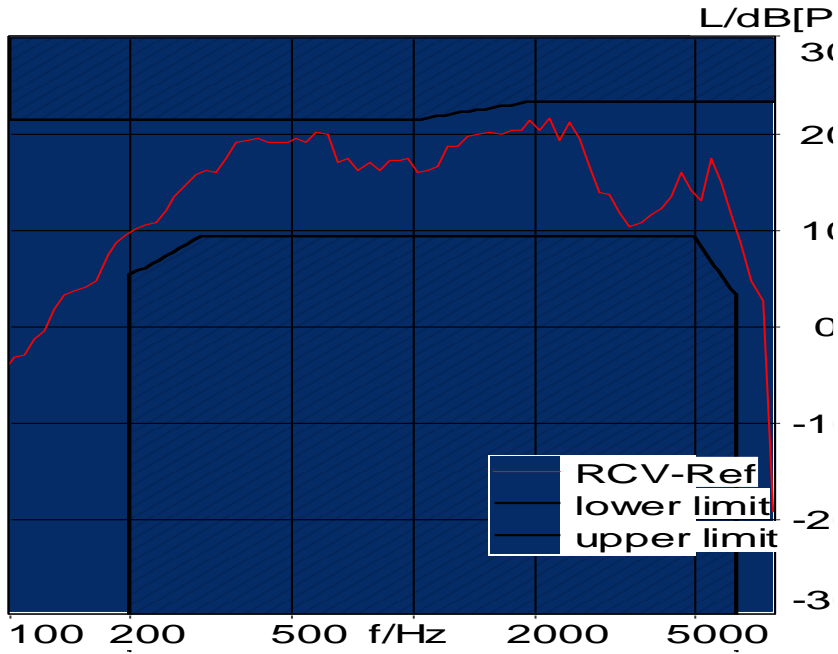
Smallest SDNR was 20.51dB at 250Hz.

2025-02-28 上午 07:01 ACQUA



5.3 Frequency Response 8N DF

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



Absolute minimal distance

1.08 dB at 576.7 Hz Ok

Ok

2025-02-28 上午 06:51 ACQUA 6.1.110

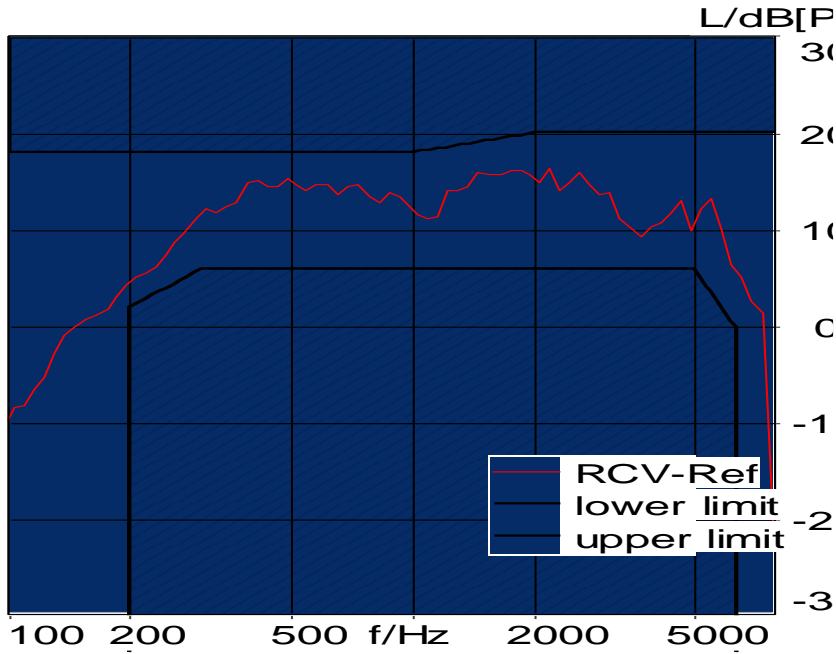
Limits

lower
Fit into tolerance



5.3 Frequency Response 2N DF

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



Absolute minimal distance

2.74 dB at 230.2 Hz Ok

Ok

2025-02-28 上午 07:02 ACQUA 6.1.110

Limits

lower
Fit into tolerance



#3 WiFi 5.3GHz EVS NB 24.4kbps

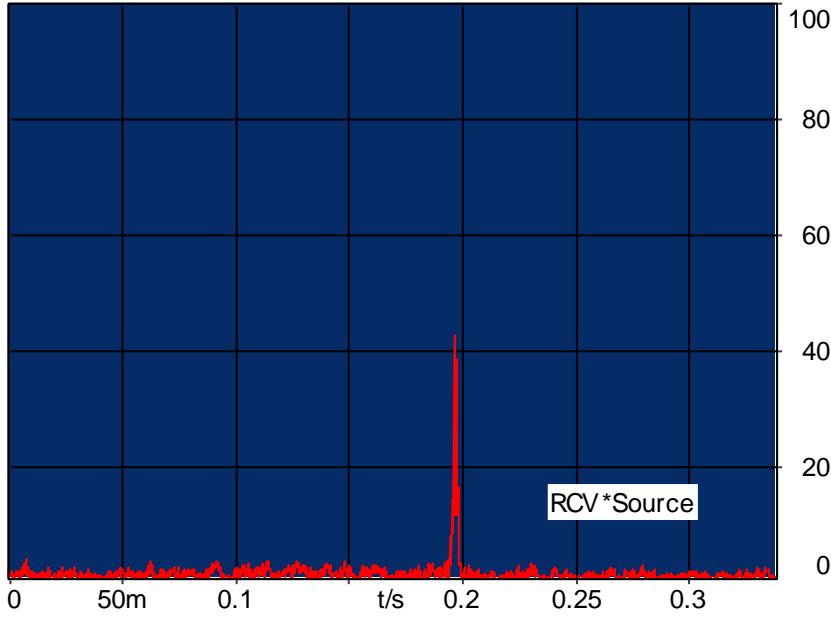
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	197.1
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	89.77
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	87.48
5.2 RCV Distortion and Noise - 400 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.64
5.2 RCV Distortion and Noise - 500 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.17
5.2 RCV Distortion and Noise - 630 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.05
5.2 RCV Distortion and Noise - 800 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.38
5.2 RCV Distortion and Noise - 1000 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	21.31
5.2 RCV Distortion and Noise - 1250 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	21.52
5.2 RCV Distortion and Noise - 1600 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.12
5.2 RCV Distortion and Noise - 2000 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.02
5.2 RCV Distortion and Noise - 2500 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.83
5.2 RCV Distortion and Noise - 3150 Hz 8N NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.71
Report - Receive Distortion and Noise (Conversational Gain) 8N NB	Ok	Minimum SDNR [dB], (occured at 1000Hz)	21.31
5.2 RCV Distortion and Noise - 400 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.69
5.2 RCV Distortion and Noise - 500 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.33
5.2 RCV Distortion and Noise - 630 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.27
5.2 RCV Distortion and Noise - 800 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.79
5.2 RCV Distortion and Noise - 1000 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	20.50
5.2 RCV Distortion and Noise - 1250 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	22.01
5.2 RCV Distortion and Noise - 1600 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.65
5.2 RCV Distortion and Noise - 2000 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	22.71
5.2 RCV Distortion and Noise - 2500 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.51
5.2 RCV Distortion and Noise - 3150 Hz 2N NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.46
Report - Receive Distortion and Noise (Conversational Gain) 2N NB	Ok	Minimum SDNR [dB], (occured at 1000Hz)	20.50
5.3 Frequency Response 8N DF HANB	Ok	Min. dist. to tolerance scheme [dB], 2302.3 Hz	0.71
5.3 Frequency Response 2N DF HANB	Ok	Min. dist. to tolerance scheme [dB], 2571.8 Hz	2.14



Overall Receive Delay NB

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

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



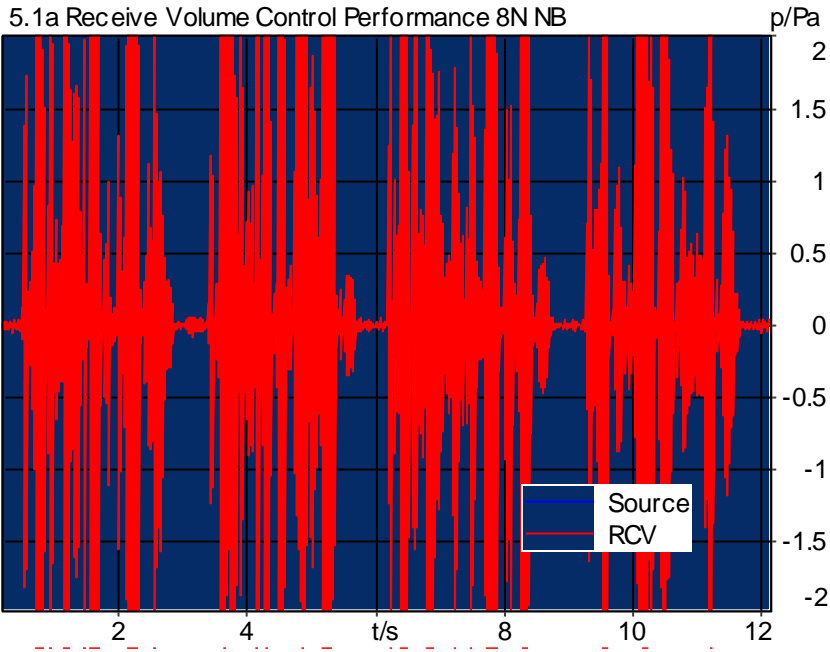
Channel	Delay	Correlation
RCV*Source	197.1 ms	42.57 %

2025-03-06 下午 02:22 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N NB

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



Channel	Speech level	Activity	
RCV	89.77 dB[SPL]	60.43%	Ok

Ok

2025-03-06 下午 02:23 ACQUA 6.1.110

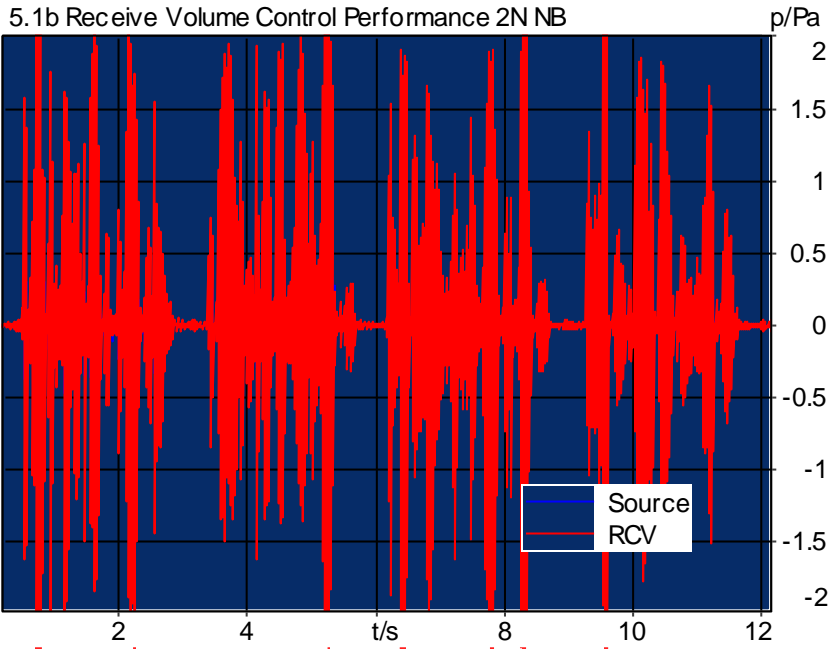
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	87.48 dB[SPL]	40.50%	Ok

Ok

2025-03-06 下午 02:38 ACQUA 6.1.110

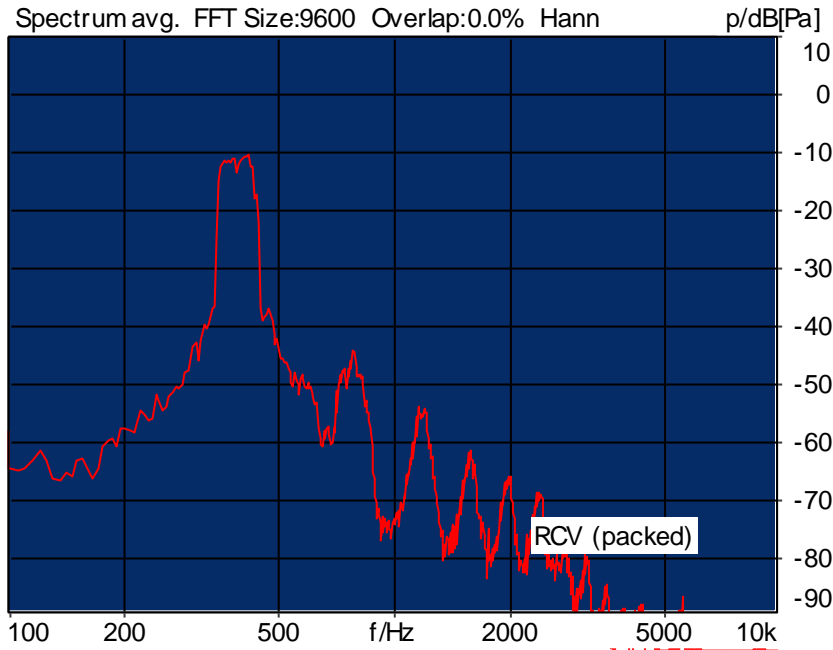
Limits

lower
76.00 dB[SPL]



5.2 RCV Distortion and Noise - 400 Hz 8N NB

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



Distortion (Noise) RCV (packed): 31.64 dB (2.62%) Ok

Ok

2025-03-06 下午 02:23 ACQUA 6.1.110

Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 500 Hz 8N NB

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



Distortion (Noise) RCV (packed): 29.17 dB (3.48%) Ok

Ok

2025-03-06 下午 02:24 ACQUA 6.1.110

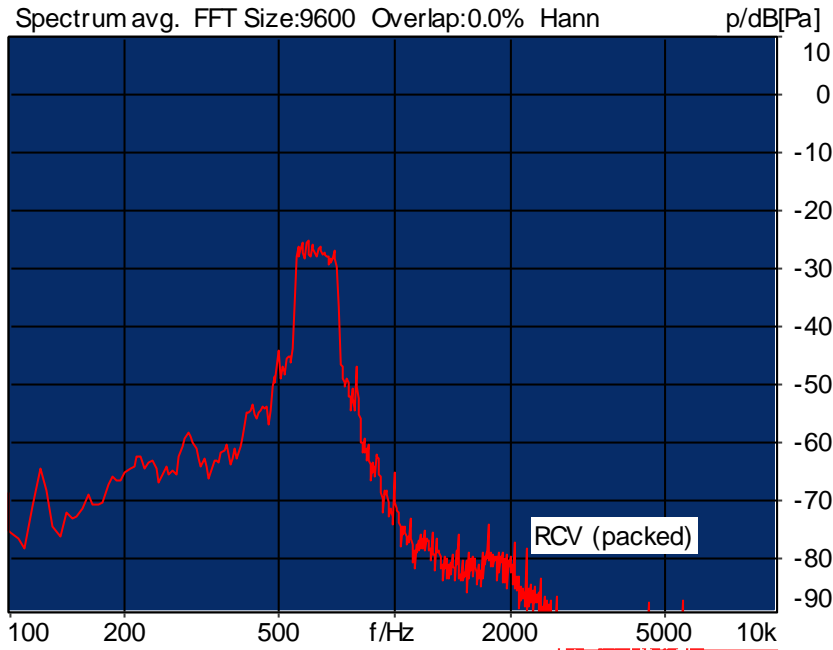
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 630 Hz 8N NB

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



Distortion (Noise) RCV (packed): 25.05 dB (5.59%) Ok

Ok

2025-03-06 下午 02:25 ACQUA 6.1.110

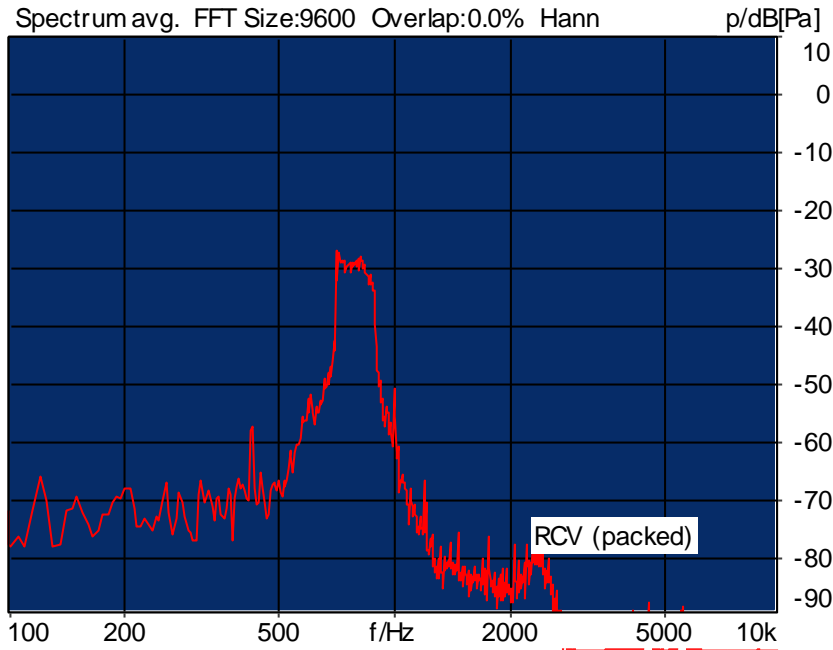
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 800 Hz 8N NB

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



Distortion (Noise) RCV (packed): 25.38 dB (5.38%) Ok

Ok

2025-03-06 下午 02:25 ACQUA 6.1.110

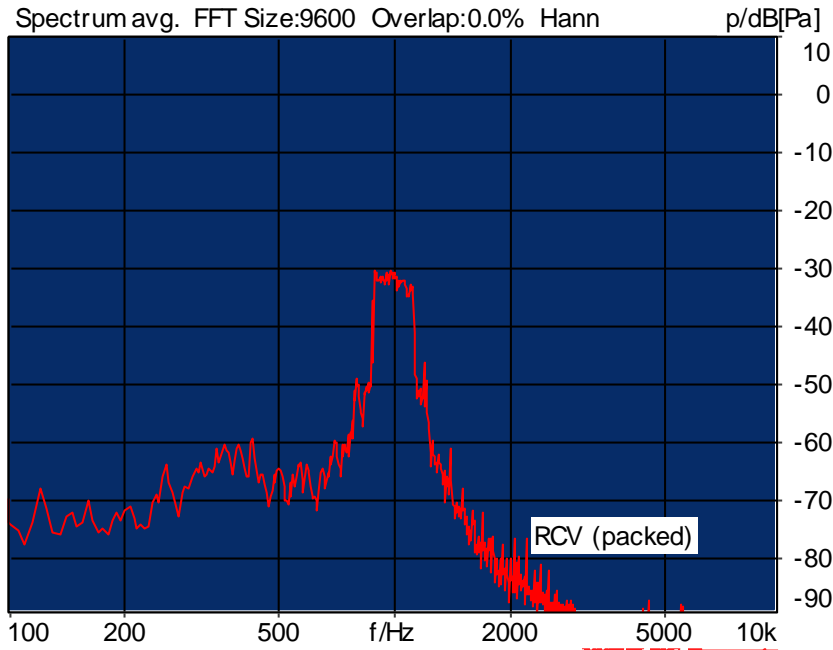
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz 8N NB

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



Distortion (Noise) RCV (packed): 21.31 dB (8.60%) Ok

Ok

2025-03-06 下午 02:26 ACQUA 6.1.110

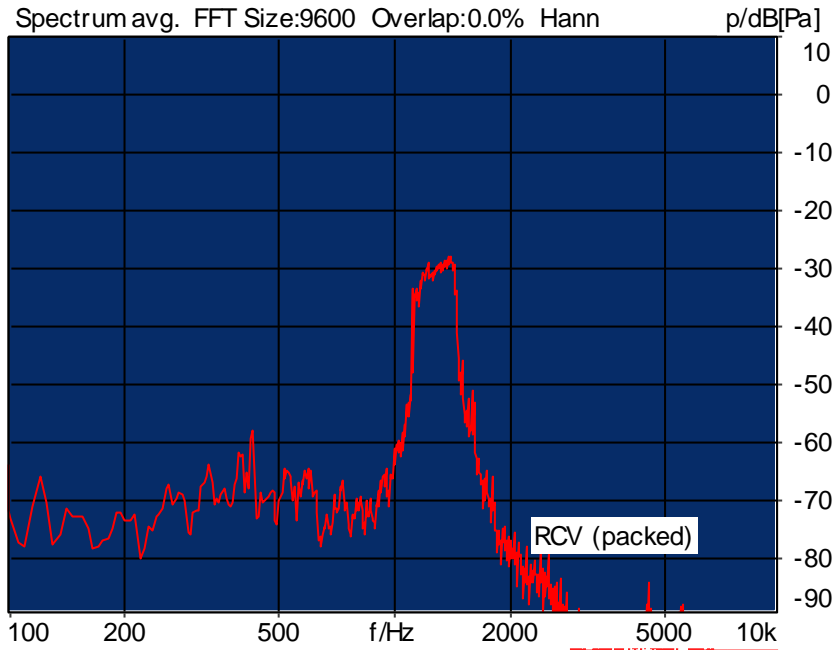
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz 8N NB

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



Distortion (Noise) RCV (packed): 21.52 dB (8.39%) Ok

Ok

2025-03-06 下午 02:26 ACQUA 6.1.110

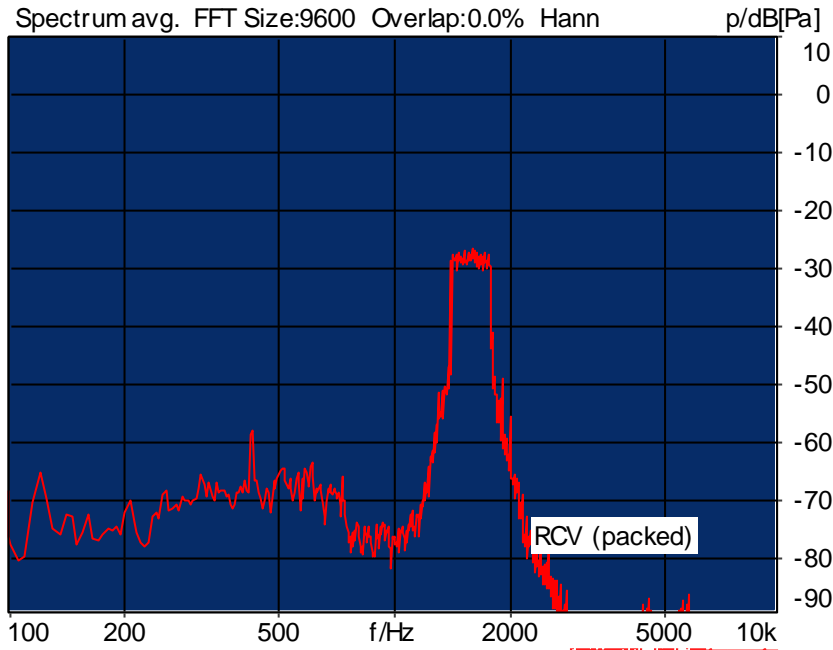
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz 8N NB

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



Distortion (Noise) RCV (packed): 26.12 dB (4.94%) Ok

Ok

2025-03-06 下午 02:27 ACQUA 6.1.110

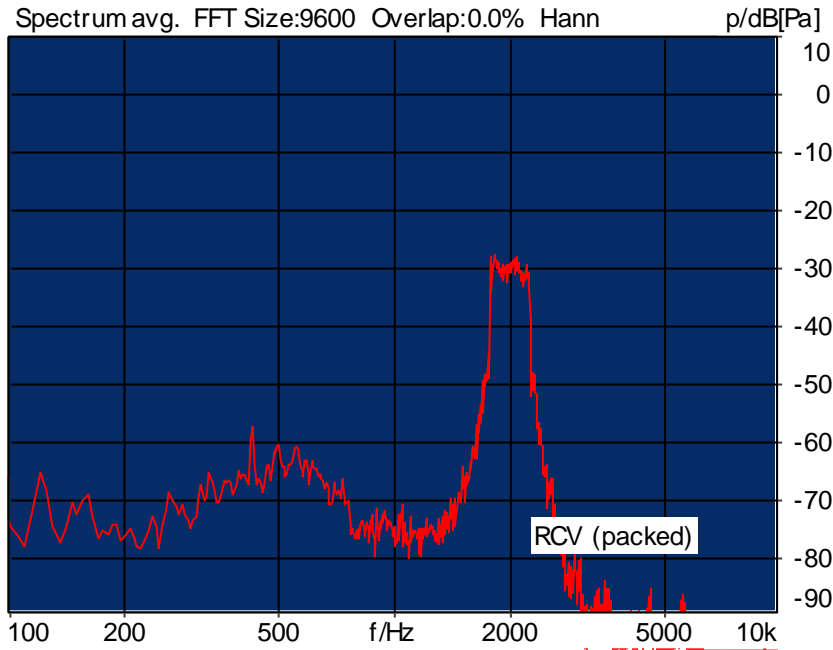
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz 8N NB

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



Distortion (Noise) RCV (packed): 24.02 dB (6.29%) Ok

Ok

2025-03-06 下午 02:28 ACQUA 6.1.110

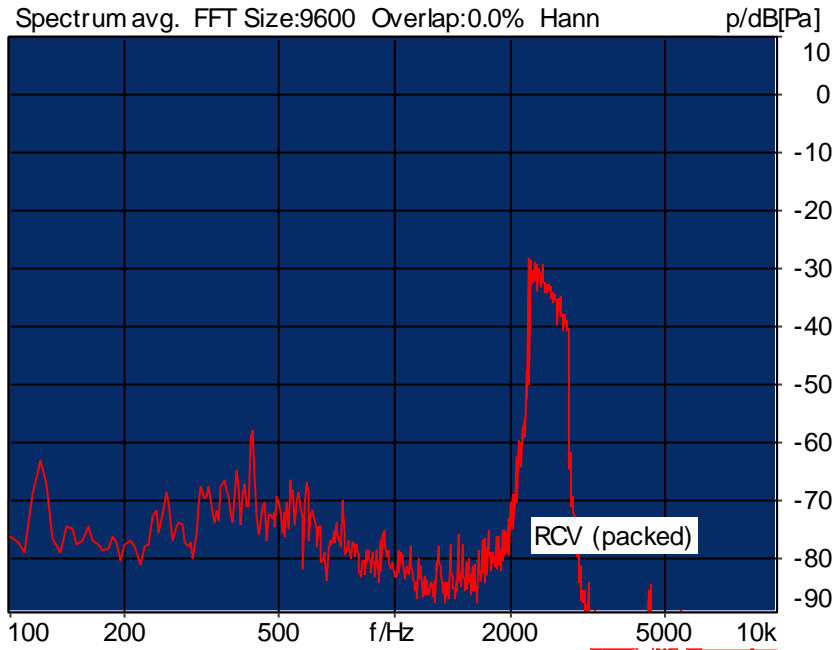
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz 8N NB

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



Distortion (Noise) RCV (packed): 28.83 dB (3.62%) Ok

Ok

2025-03-06 下午 02:28 ACQUA 6.1.110

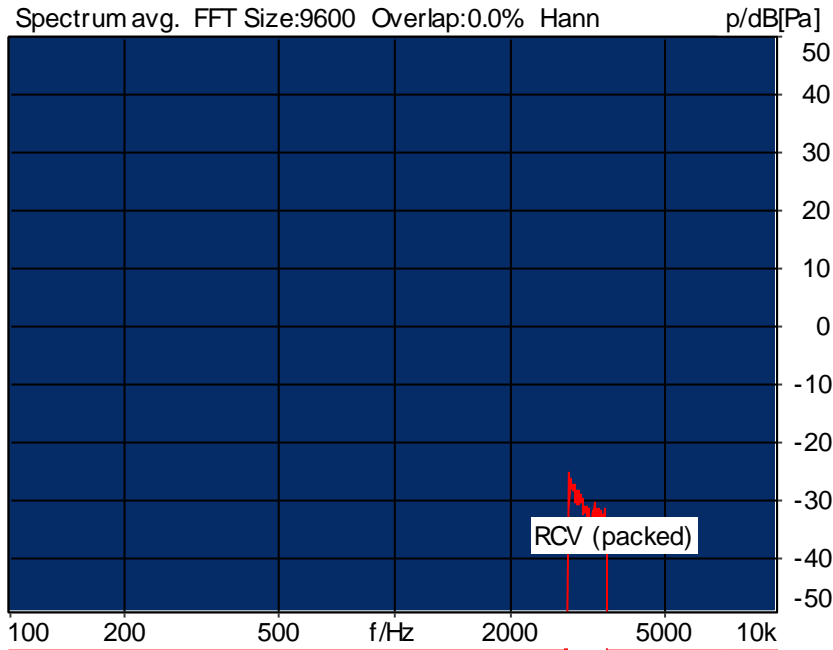
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz 8N NB

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



Distortion (Noise) RCV (packed): 38.71 dB (1.16%) Ok

Ok

2025-03-06 下午 02:29 ACQUA 6.1.110

Limits

lower
20.00 dB



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

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

Region	Frequency	SDNR
1	400Hz	31.64 dB
2	500Hz	29.17 dB
3	630Hz	25.05 dB
4	800Hz	25.38 dB
5	1000Hz	21.31 dB
6	1250Hz	21.52 dB
7	1600Hz	26.12 dB
8	2000Hz	24.02 dB
9	2500Hz	28.83 dB
10	3150Hz	38.71 dB

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

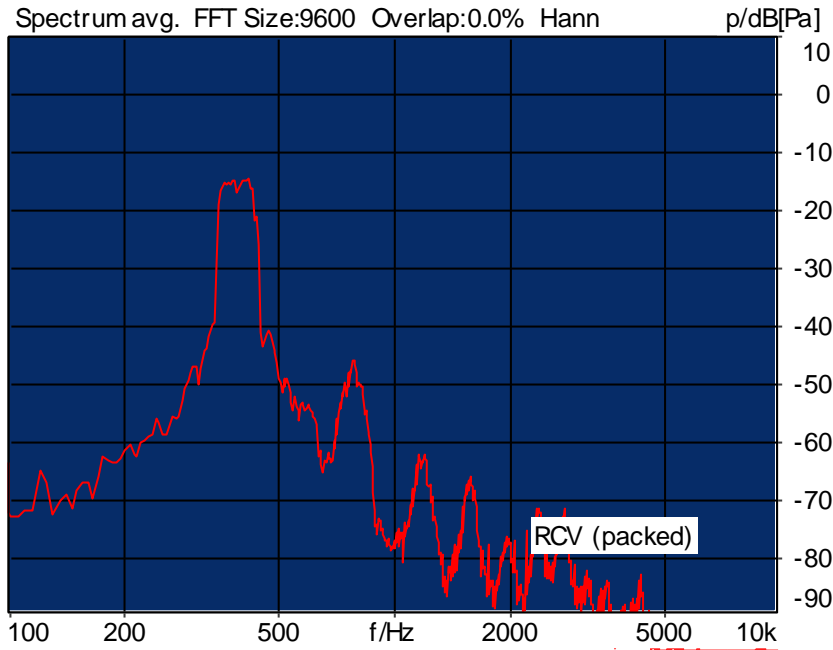
Smallest SDNR was 21.31dB at 1000Hz.

2025-03-06 下午 02:29 ACQUA



5.2 RCV Distortion and Noise - 400 Hz 2N NB

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



Distortion (Noise) RCV (packed): 30.69 dB (2.92%) Ok

Ok

2025-03-06 下午 02:31 ACQUA 6.1.110

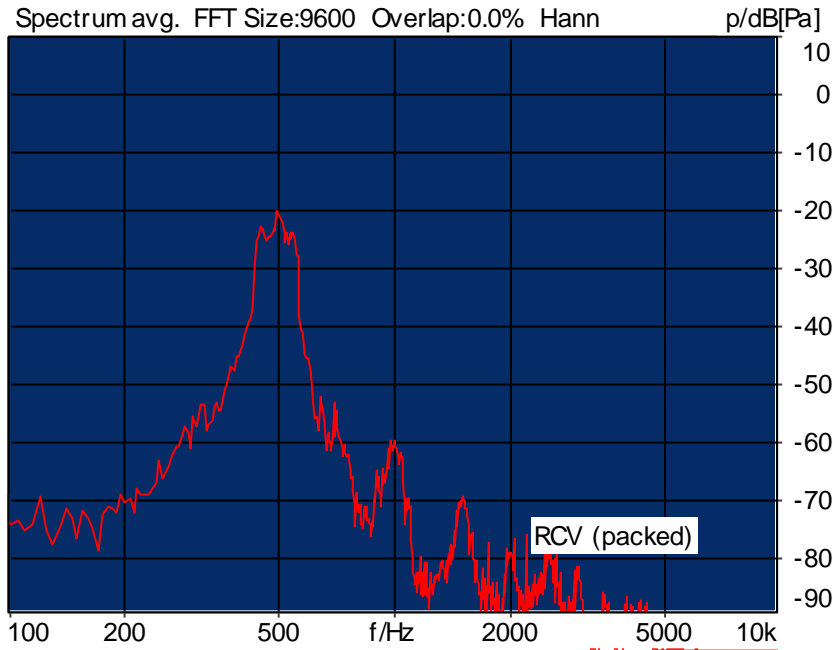
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 500 Hz 2N NB

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



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

Ok

2025-03-06 下午 02:31 ACQUA 6.1.110

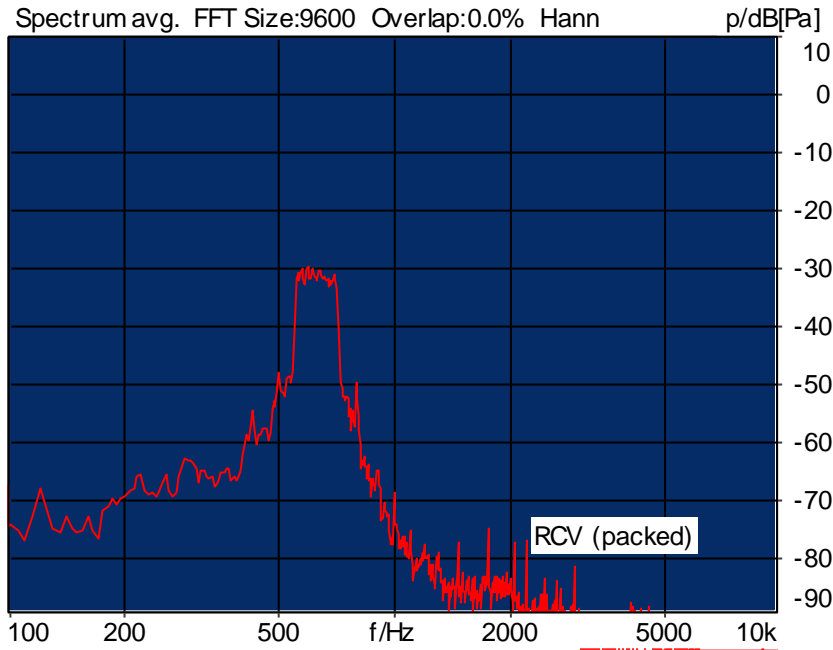
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 630 Hz 2N NB

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



Distortion (Noise) RCV (packed): 24.27 dB (6.12%) Ok

Ok

2025-03-06 下午 02:32 ACQUA 6.1.110

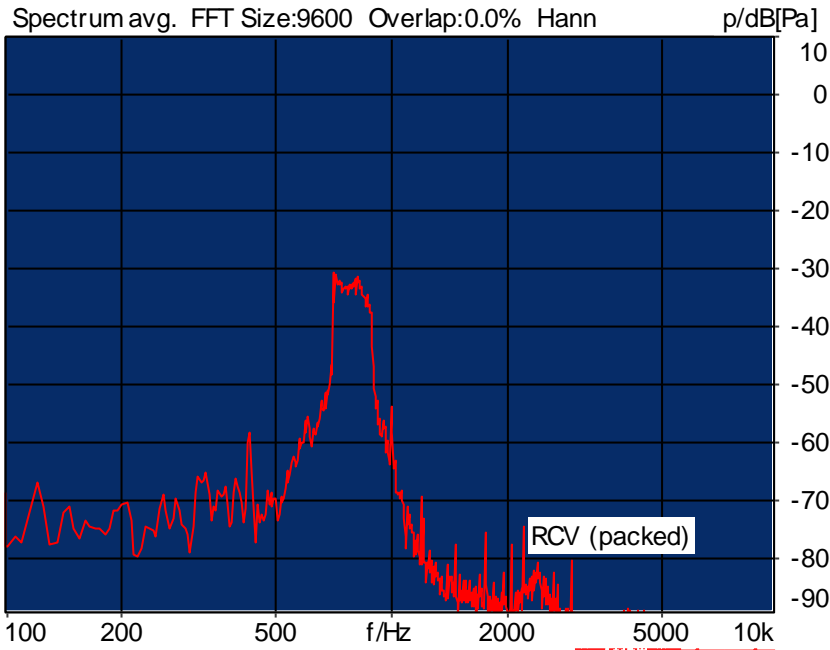
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 800 Hz 2N NB

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



Distortion (Noise) RCV (packed): 24.79 dB (5.76%) Ok

Ok

2025-03-06 下午 02:33 ACQUA 6.1.110

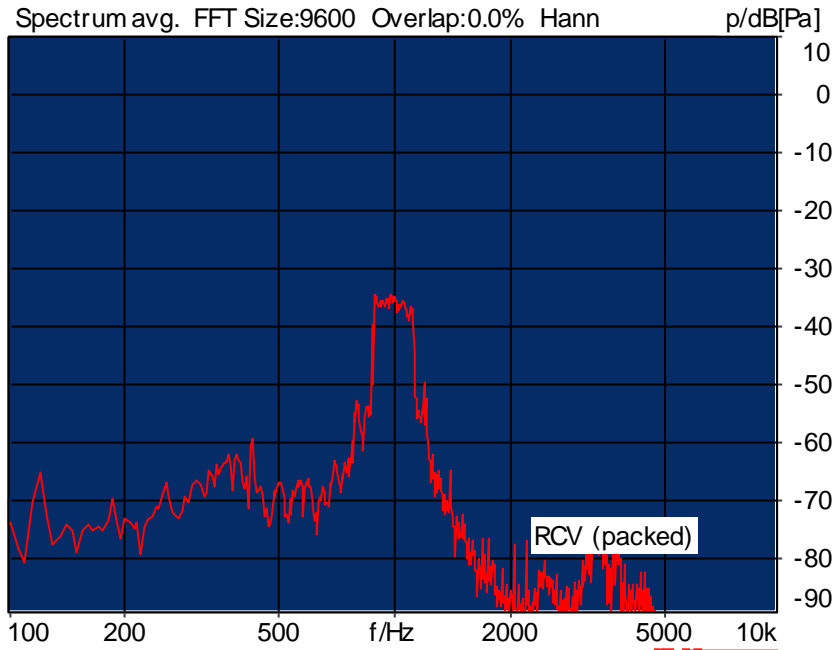
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz 2N NB

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



Distortion (Noise) RCV (packed): 20.50 dB (9.44%) Ok

Ok

2025-03-06 下午 02:33 ACQUA 6.1.110

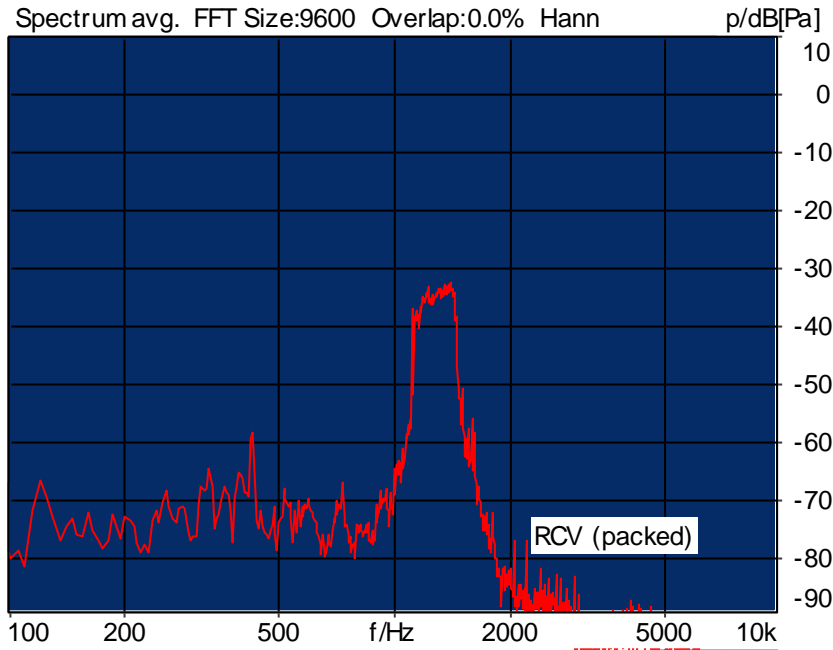
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz 2N NB

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



Distortion (Noise) RCV (packed): 22.01 dB (7.93%) Ok

Ok

2025-03-06 下午 02:34 ACQUA 6.1.110

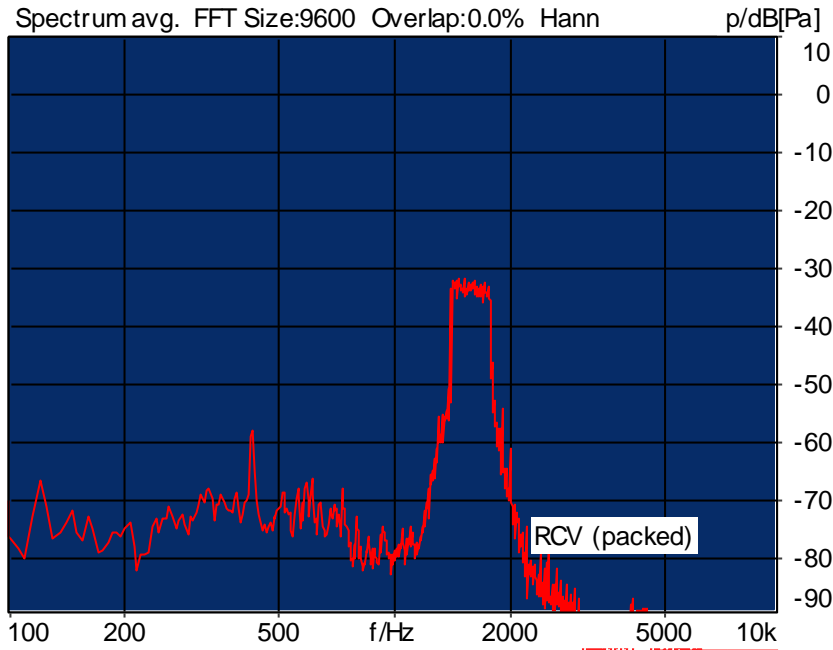
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz 2N NB

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



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

Ok

2025-03-06 下午 02:34 ACQUA 6.1.110

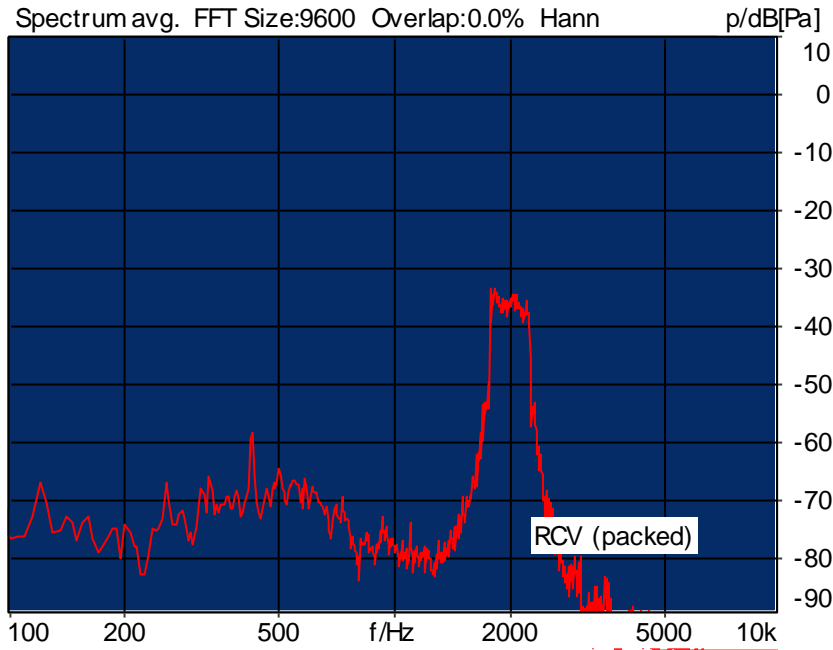
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz 2N NB

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



Distortion (Noise) RCV (packed): 22.71 dB (7.32%) Ok

Ok

2025-03-06 下午 02:35 ACQUA 6.1.110

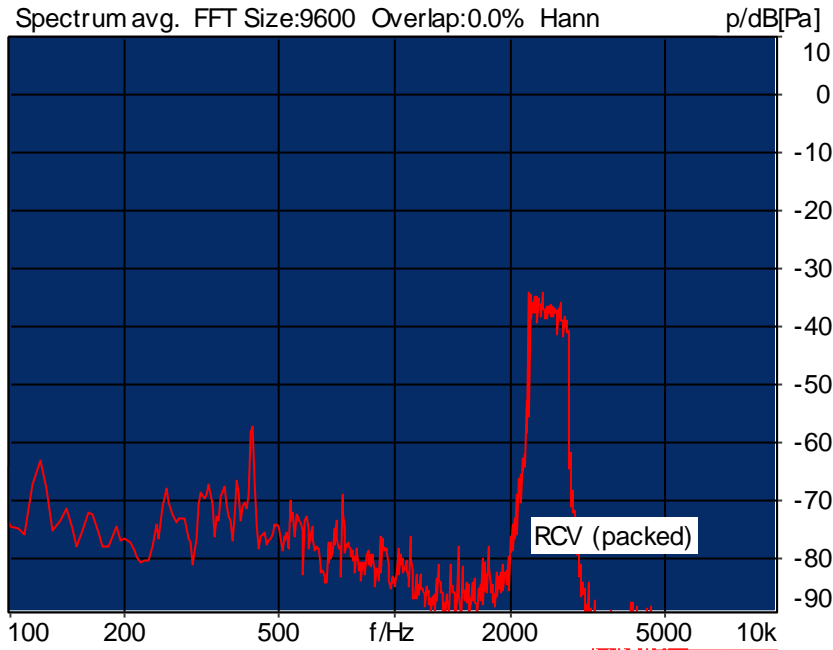
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz 2N NB

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



Distortion (Noise) RCV (packed): 29.51 dB (3.34%) Ok

Ok

2025-03-06 下午 02:36 ACQUA 6.1.110

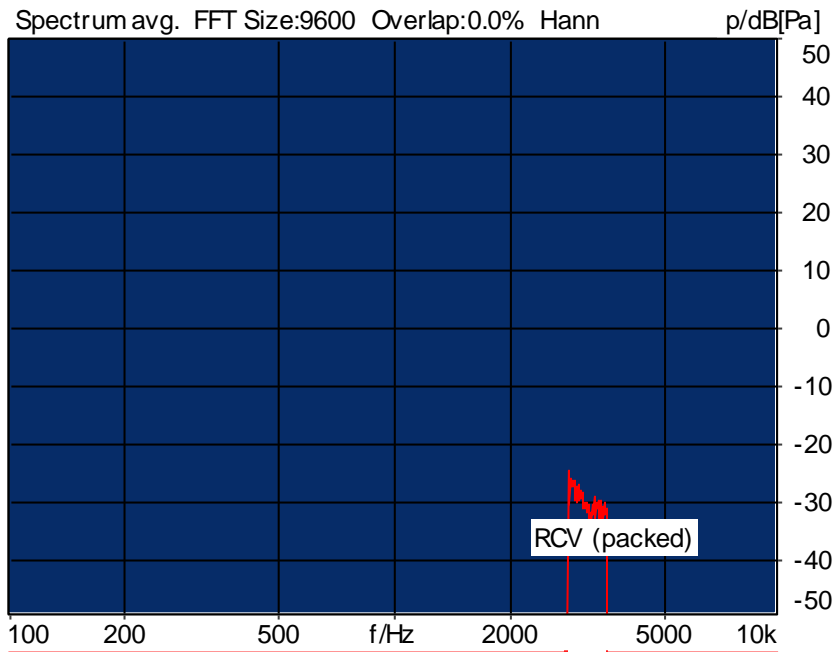
Limits

lower
20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz 2N NB

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



Distortion (Noise) RCV (packed): 41.46 dB (0.85%) Ok

Ok

2025-03-06 下午 02:36 ACQUA 6.1.110

Limits

lower
20.00 dB



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

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

Region	Frequency	SDNR
1	400Hz	30.69 dB
2	500Hz	28.33 dB
3	630Hz	24.27 dB
4	800Hz	24.79 dB
5	1000Hz	20.50 dB
6	1250Hz	22.01 dB
7	1600Hz	25.65 dB
8	2000Hz	22.71 dB
9	2500Hz	29.51 dB
10	3150Hz	41.46 dB

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

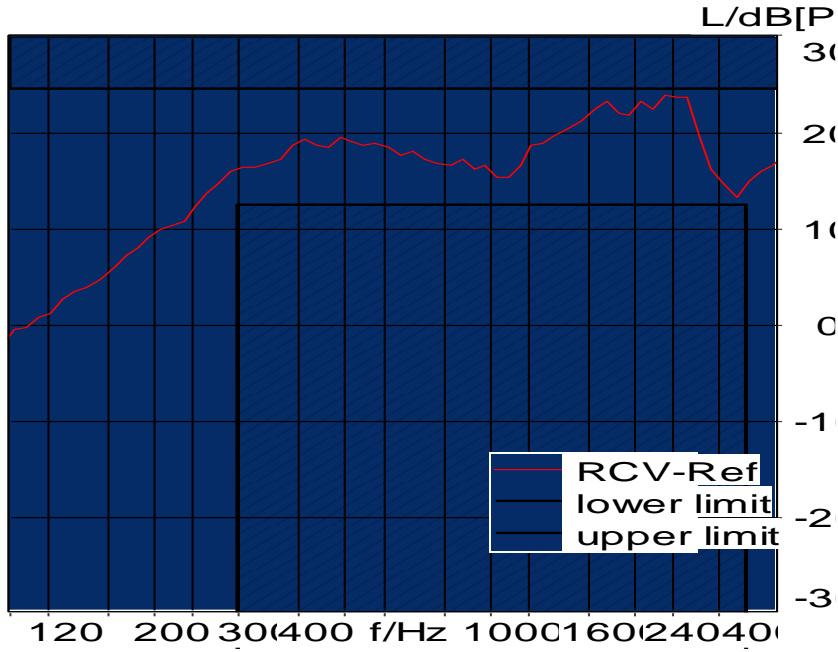
Smallest SDNR was 20.50dB at 1000Hz.

2025-03-06 下午 02:36 ACQUA



5.3 Frequency Response 8N DF HANB

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



Absolute minimal distance

0.71 dB at 2302.3 Hz Ok

Ok

2025-03-06 下午 02:41 ACQUA 6.1.110

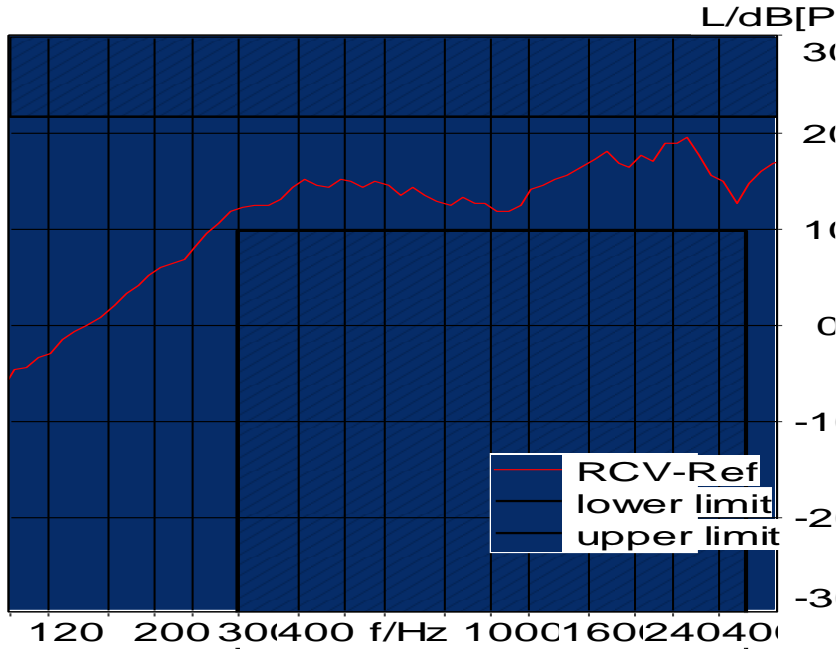
Limits

lower
Fit into tolerance



5.3 Frequency Response 2N DF HANB

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



Absolute minimal distance

2.14 dB at 2571.8 Hz Ok

Ok

2025-03-06 下午 02:37 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 AMR WB 6.60kbps

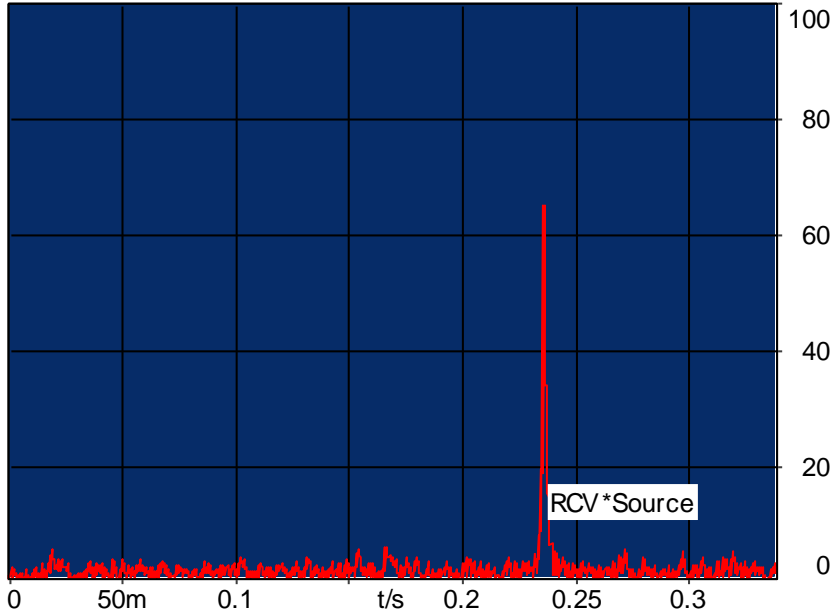
SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	236.6
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	90.65
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	88.08



Overall Receive Delay WB

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

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



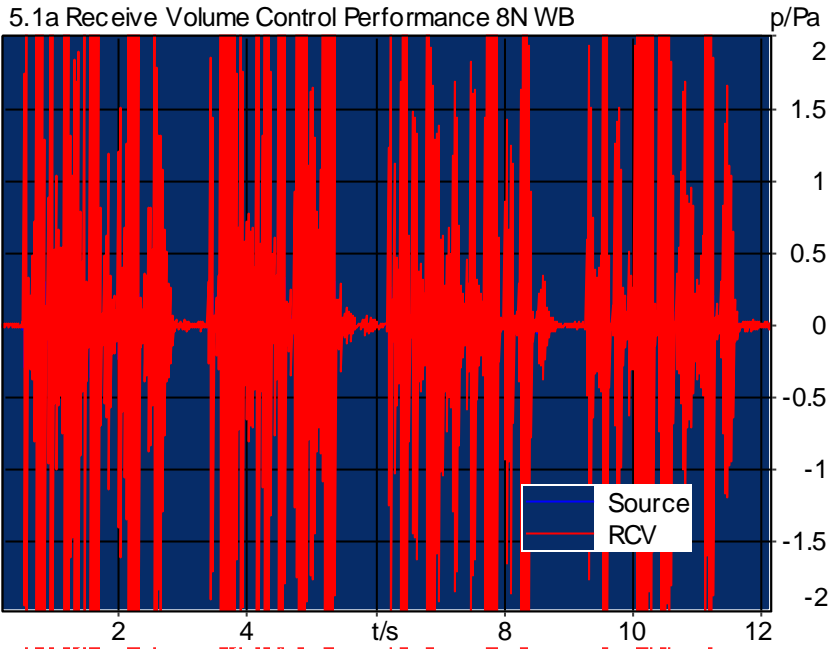
Channel	Delay	Correlation
RCV*Source	236.6 ms	65.20 %

2025-01-17 上午 08:46 ACQUA 6.1.100



5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	90.65 dB[SPL]	65.27%	Ok

Ok

2025-01-17 上午 08:49 ACQUA 6.1.100

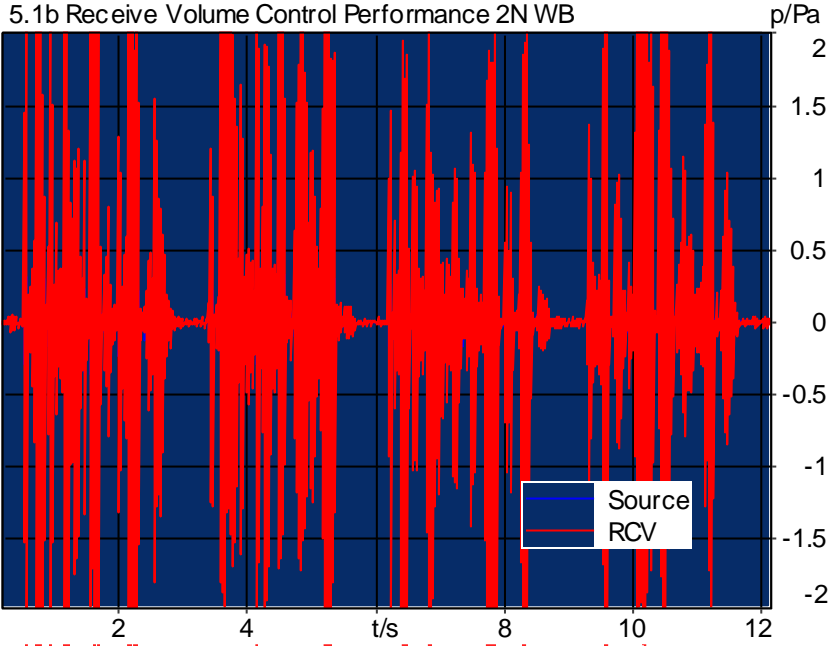
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	88.08 dB[SPL]	52.52%	Ok

Ok

2025-01-17 上午 08:47 ACQUA 6.1.100

Limits

lower
76.00 dB[SPL]



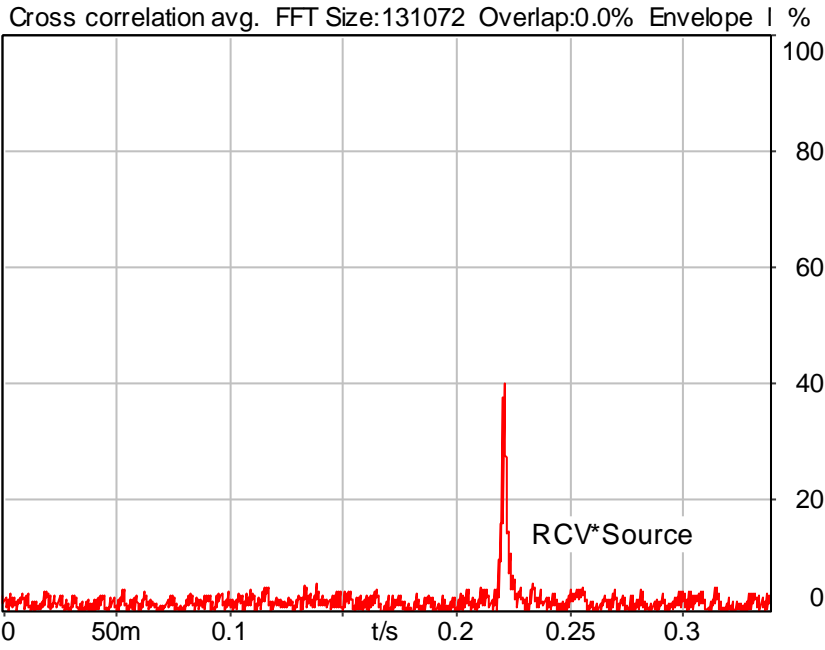
#5 WCDMA IV AMR NB 4.75kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	221.1
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	89.32
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	87.22



Overall Receive Delay NB

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



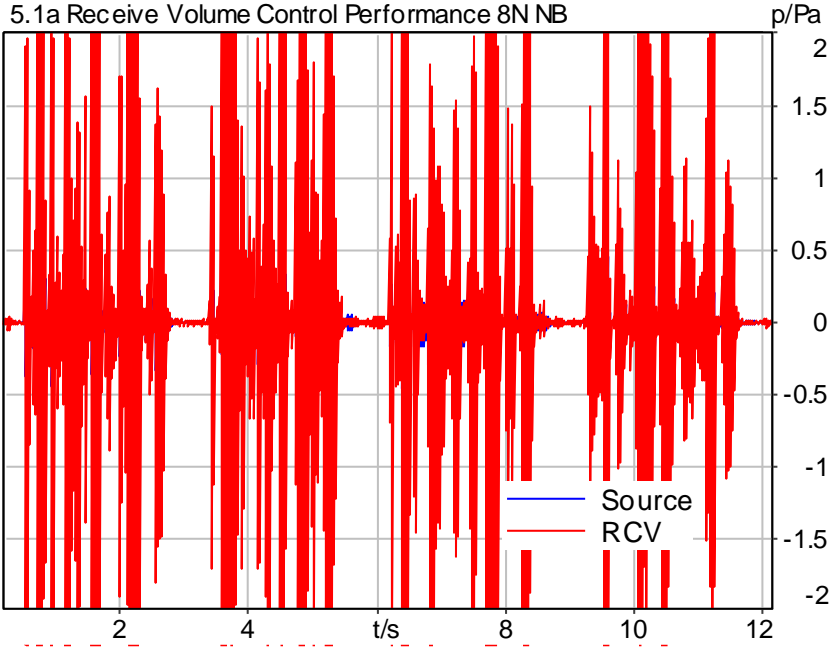
Channel	Delay
RCV*Source	221.1 ms

2024-08-31 下午 07:45 ACQUA 6.0.200



5.1a Receive Volume Control Performance 8N NB

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



Channel	Speech level	Activity	
RCV	89.32 dB[SPL]	59.10%	Ok

Ok

2024-08-31 下午 07:48 ACQUA 6.0.200

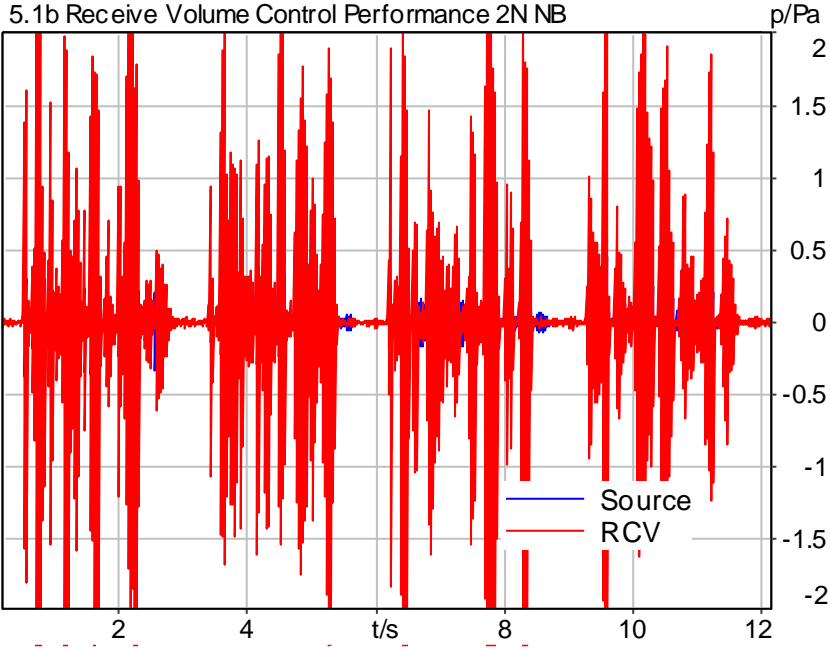
Limits

	lower
Run 1	76.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	87.22 dB[SPL]	39.02%	Ok

Ok

2024-08-31 下午 07:46 ACQUA 6.0.200

Limits

	lower
Run 1	76.00 dB20uPa



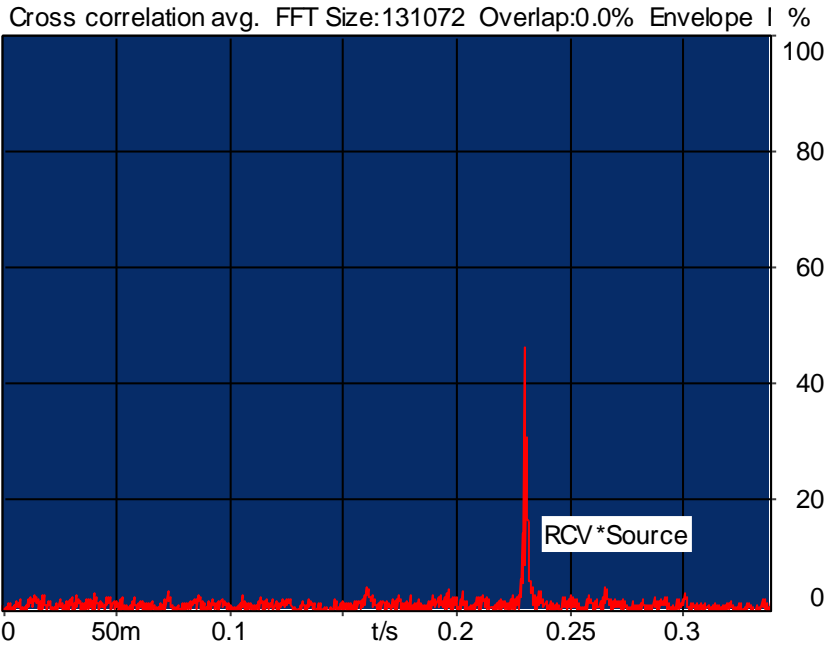
#6 LTE Band 41 AMR WB 23.85kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	230.9
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	89.27
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	86.84



Overall Receive Delay WB

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



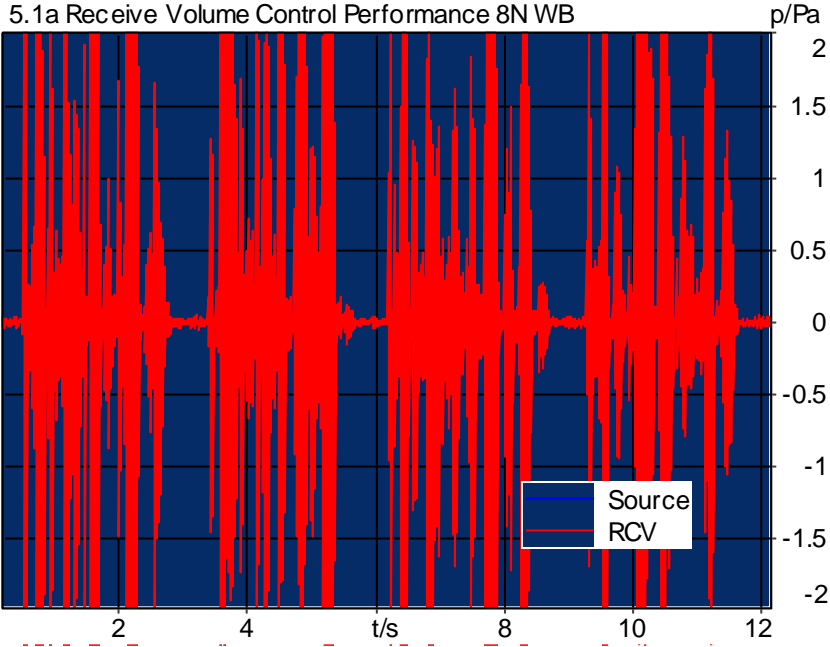
Channel	Delay	Correlation
RCV*Source	230.9 ms	46.18 %

2025-03-07 上午 07:38 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	89.27 dB[SPL]	58.11%	Ok

Ok

2025-03-07 上午 07:41 ACQUA 6.1.110

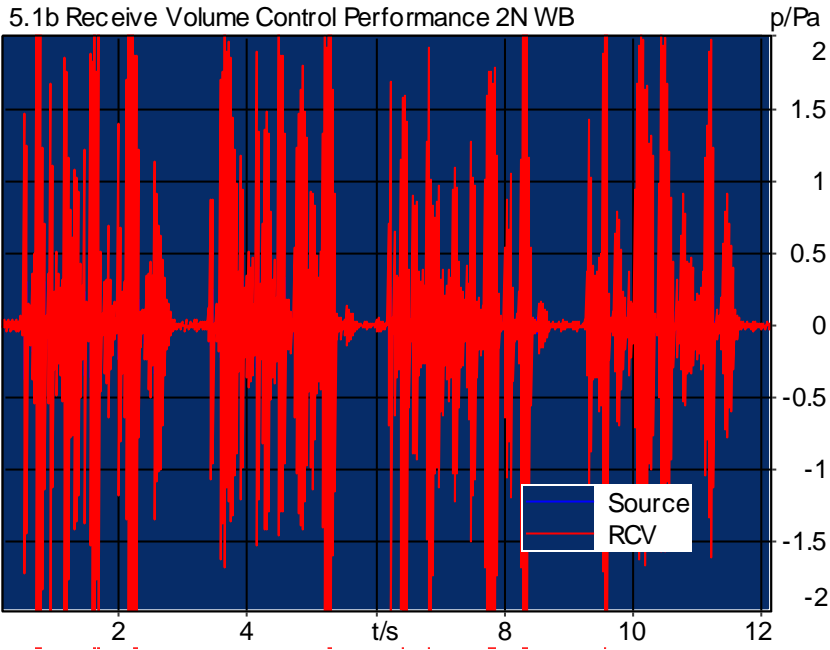
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	86.84 dB[SPL]	49.30%	Ok

Ok

2025-03-07 上午 07:40 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]



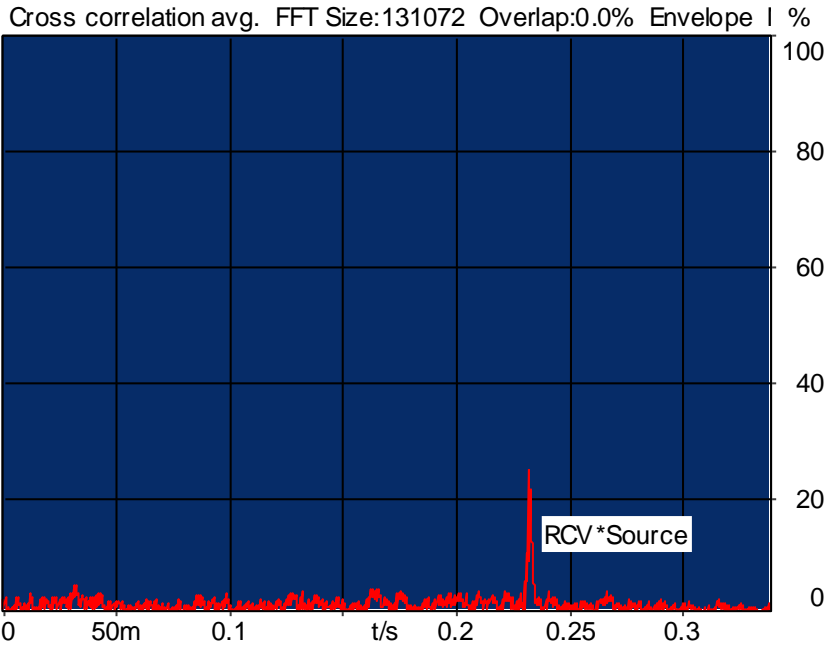
#7 FR1 n12 AMR NB 4.75kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	232.7
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	90.17
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	87.10



Overall Receive Delay NB

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



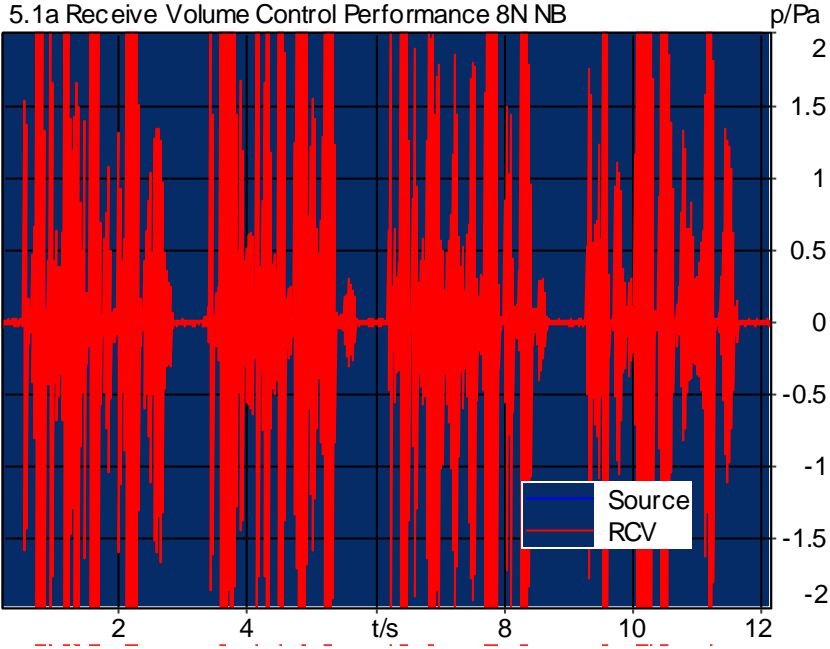
Channel	Delay	Correlation
RCV*Source	232.7 ms	25.11 %

2025-02-28 上午 06:20 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N NB

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



Channel	Speech level	Activity	
RCV	90.17 dB[SPL]	62.38%	Ok

Ok

2025-02-28 上午 06:21 ACQUA 6.1.110

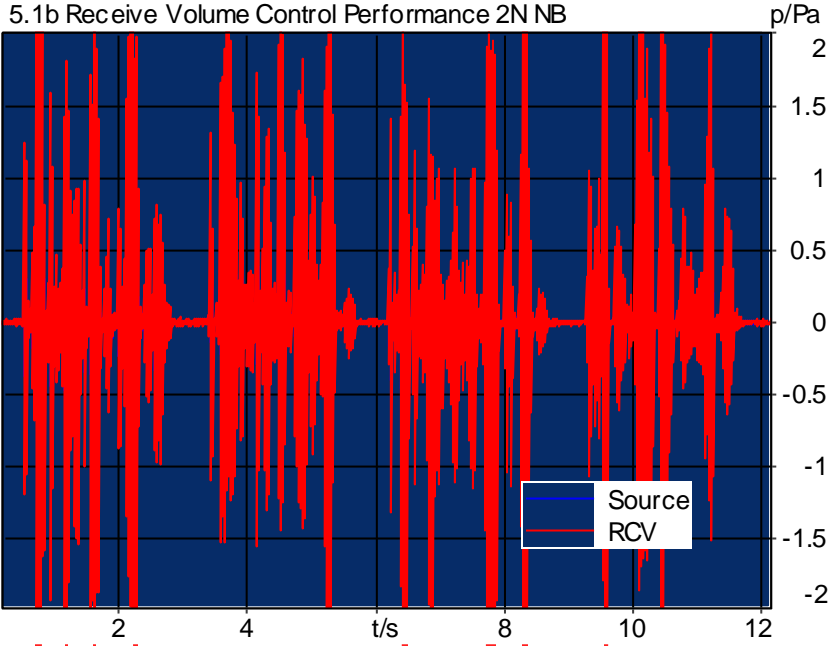
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	87.10 dB[SPL]	47.91%	Ok

Ok

2025-02-28 上午 06:21 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]



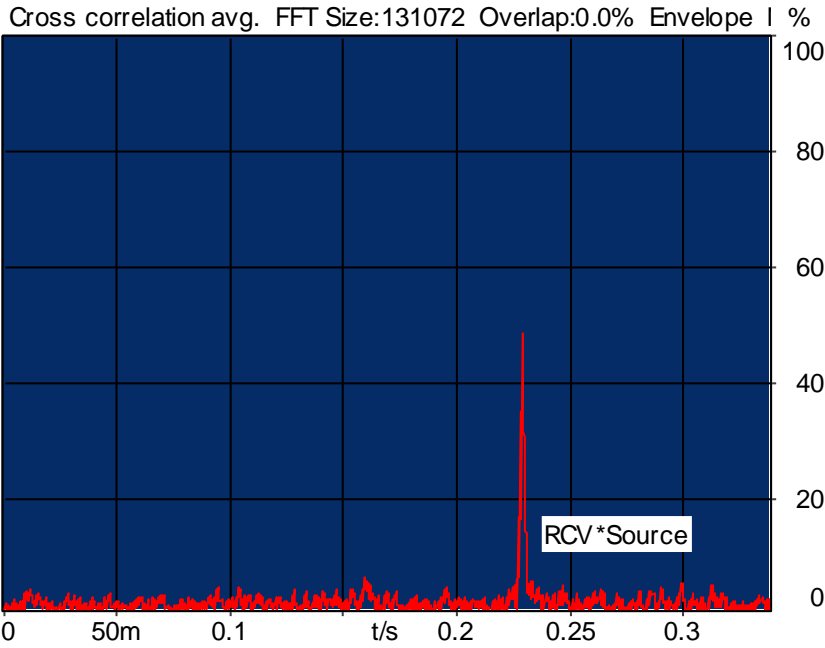
#8 WiFi 5.8GHz AMR WB 6.60kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	229.4
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	89.07
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	87.00



Overall Receive Delay WB

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



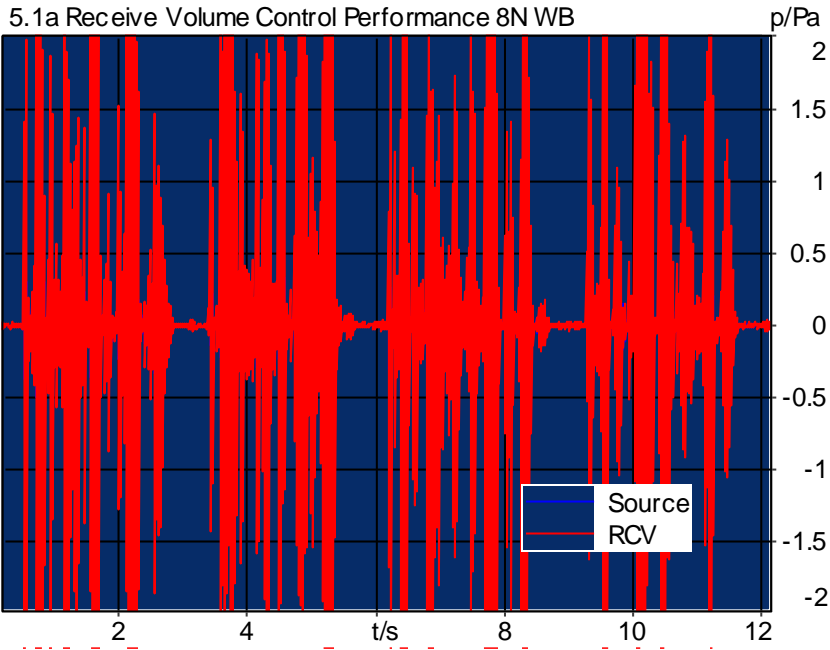
Channel	Delay	Correlation
RCV*Source	229.4 ms	48.58 %

2025-03-07 上午 03:34 ACQUA 6.1.110



5.1a Receive Volume Control Performance 8N WB

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



Channel	Speech level	Activity	
RCV	89.07 dB[SPL]	55.92%	Ok

Ok

2025-03-07 上午 03:34 ACQUA 6.1.110

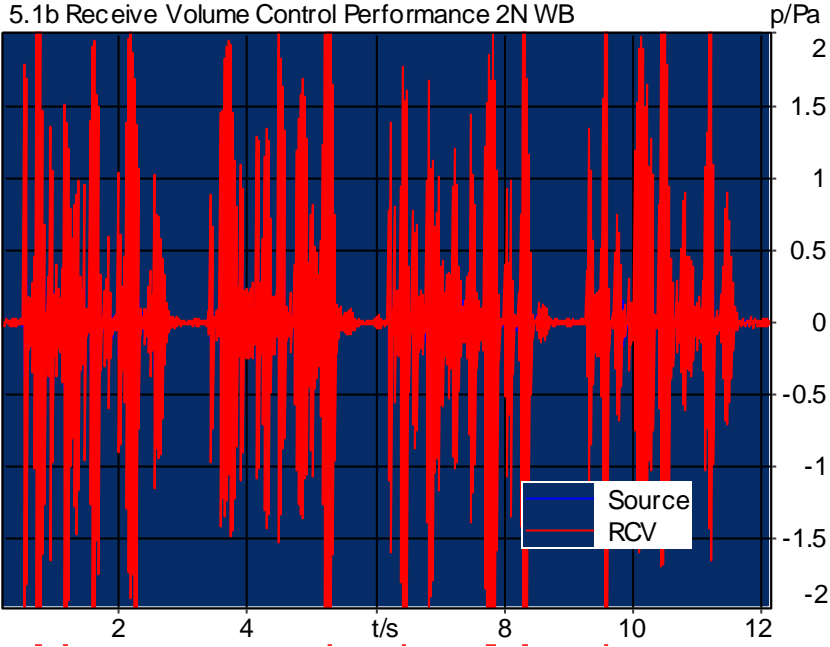
Limits

lower
76.00 dB[SPL]



5.1b Receive Volume Control Performance 2N WB

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



Channel	Speech level	Activity	
RCV	87.00 dB[SPL]	43.70%	Ok

Ok

2025-03-07 上午 03:37 ACQUA 6.1.110

Limits

lower
76.00 dB[SPL]