



Appendix A. Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.a>



#1 GSM850 AMR NB 12.2kbps

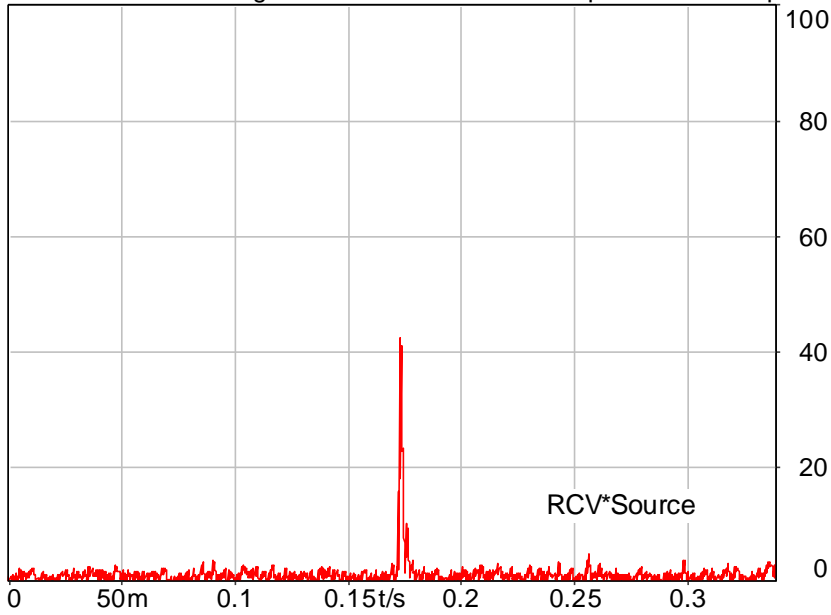
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	173.0
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	95.67
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	91.41
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.10
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.05
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.85
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.87
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.29
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.27
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.42
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.69
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.16
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.43
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.45
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.91
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.92
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.94
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.83
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.93
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.72
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.36
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.68
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.62
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 649.1 Hz	1.39
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3058.6 Hz	0.39



Overall Receive Delay NB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



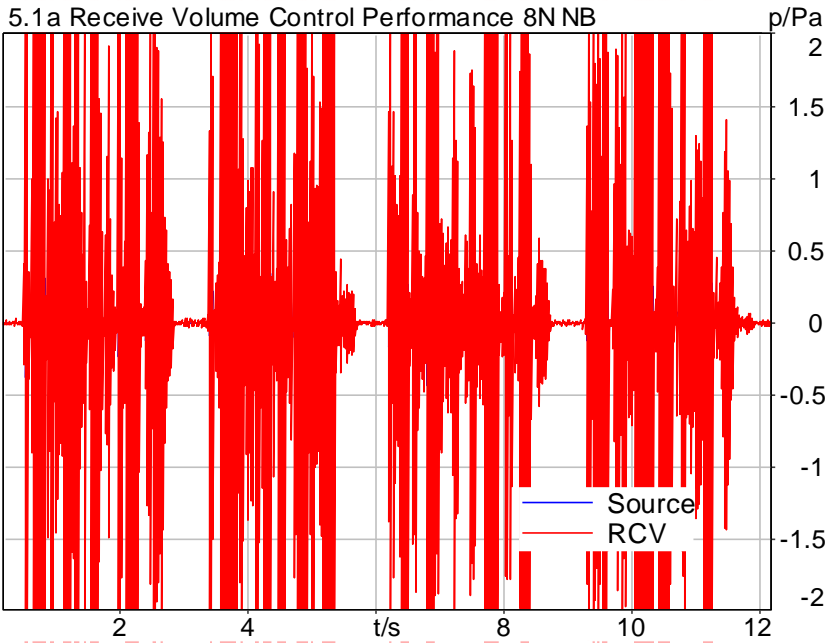
Delay (Cross): 173.0 ms

2023/11/23 下午 07:27 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N NB

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



Speech Level RCV: 95.67 dB[SPL], Act.: 64.40% Ok

Ok

2023/11/23 下午 07:28 ACQUA 5.1.200

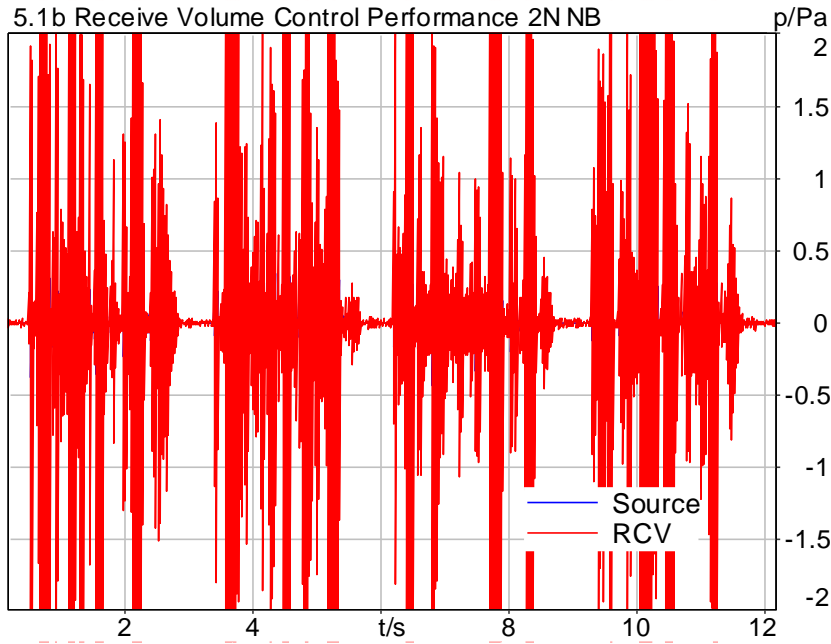
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Speech Level RCV: 91.41 dB[SPL], Act.: 51.55% Ok

Ok

2023/11/23 下午 07:35 ACQUA 5.1.200

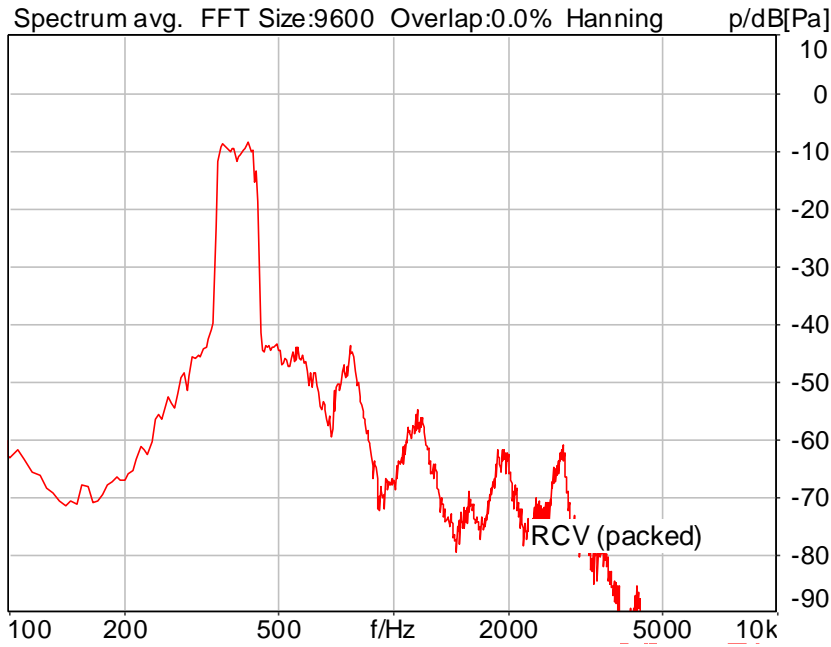
Limits

	lower
Run 1	76.00 dB20uPa



5.2 RCV Distortion and Noise - 400 Hz NB

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



Distortion (Noise) RCV (packed): 33.10 dB (2.21%) Ok

Ok

2023/11/23 下午 07:28 ACQUA 5.1.200

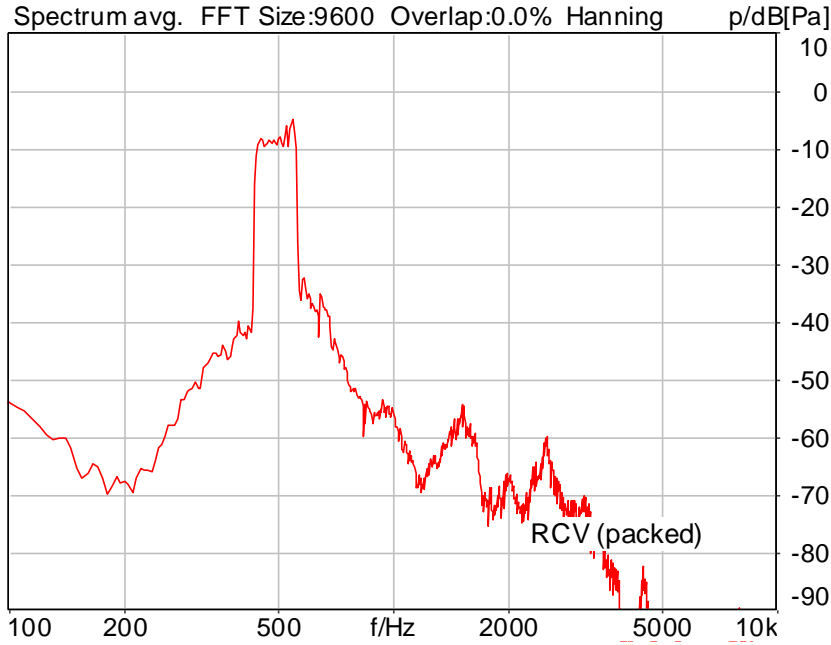
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Distortion (Noise) RCV (packed): 31.05 dB (2.80%) Ok

Ok

2023/11/23 下午 07:28 ACQUA 5.1.200

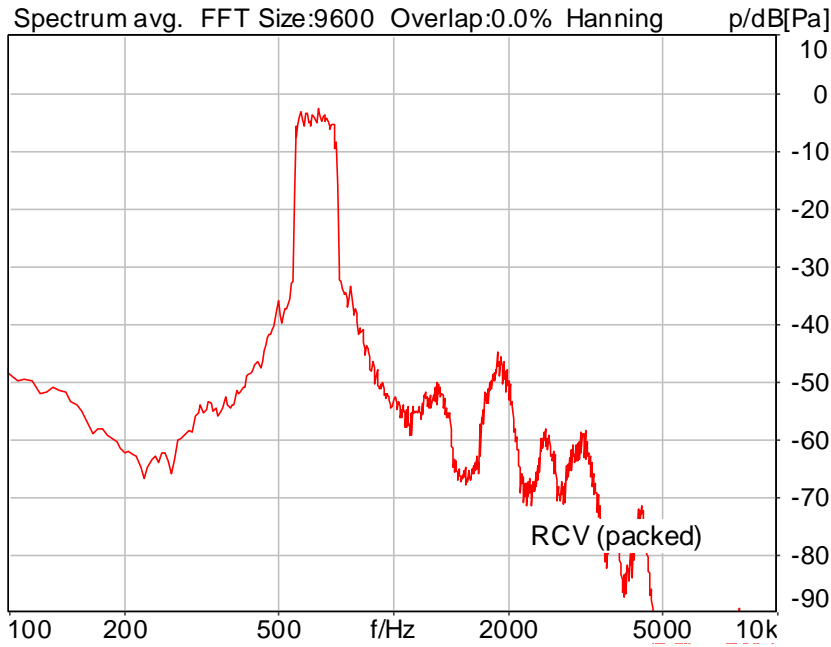
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 32.85 dB (2.28%) Ok

Ok

2023/11/23 下午 07:29 ACQUA 5.1.200

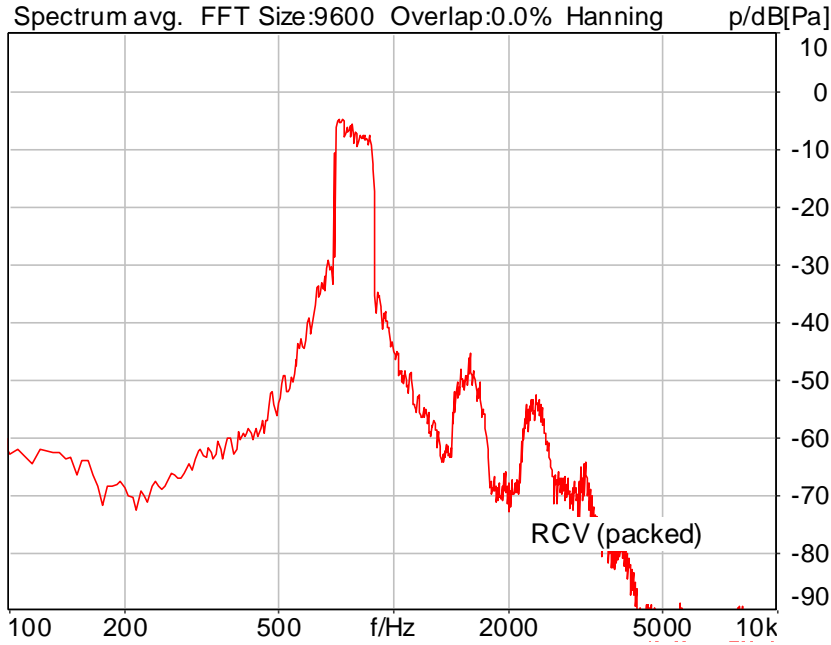
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 30.87 dB (2.86%) Ok

Ok

2023/11/23 下午 07:29 ACQUA 5.1.200

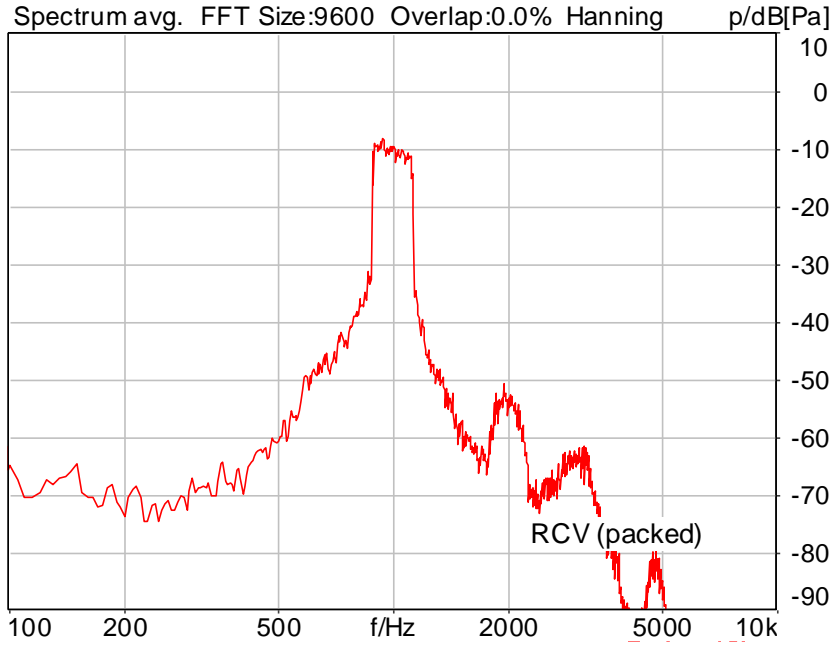
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Distortion (Noise) RCV (packed): 29.29 dB (3.43%) Ok

Ok

2023/11/23 下午 07:30 ACQUA 5.1.200

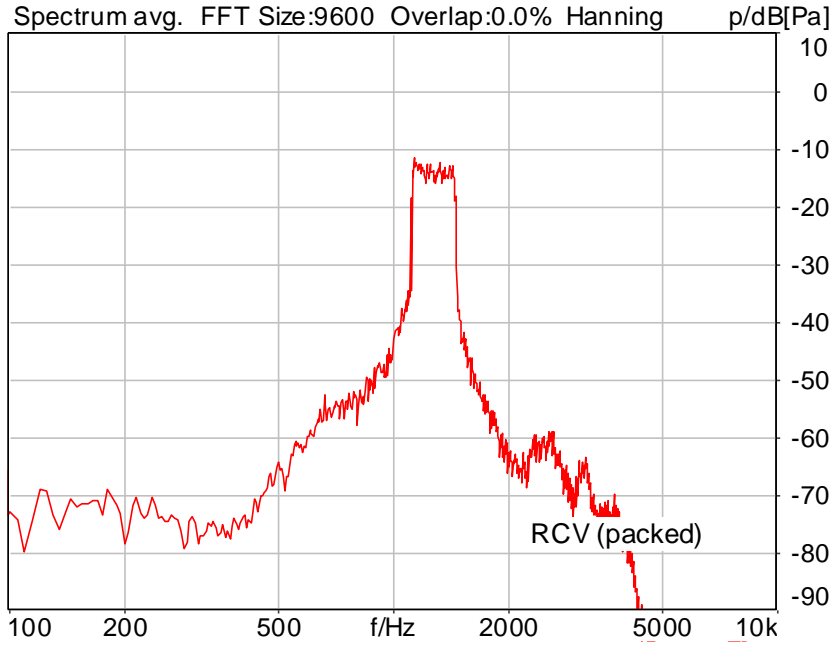
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



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

Ok

2023/11/23 下午 07:30 ACQUA 5.1.200

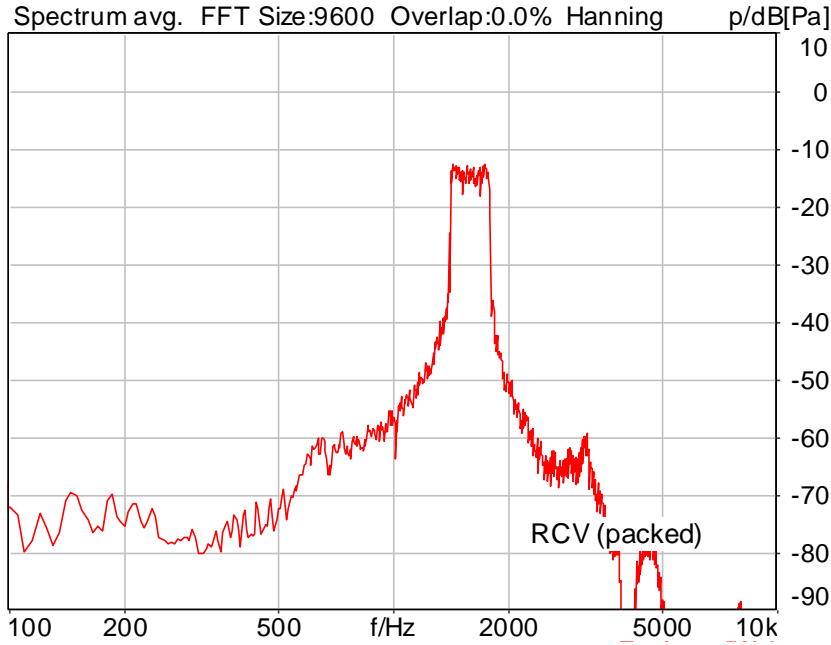
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 28.42 dB (3.79%) Ok

Ok

2023/11/23 下午 07:31 ACQUA 5.1.200

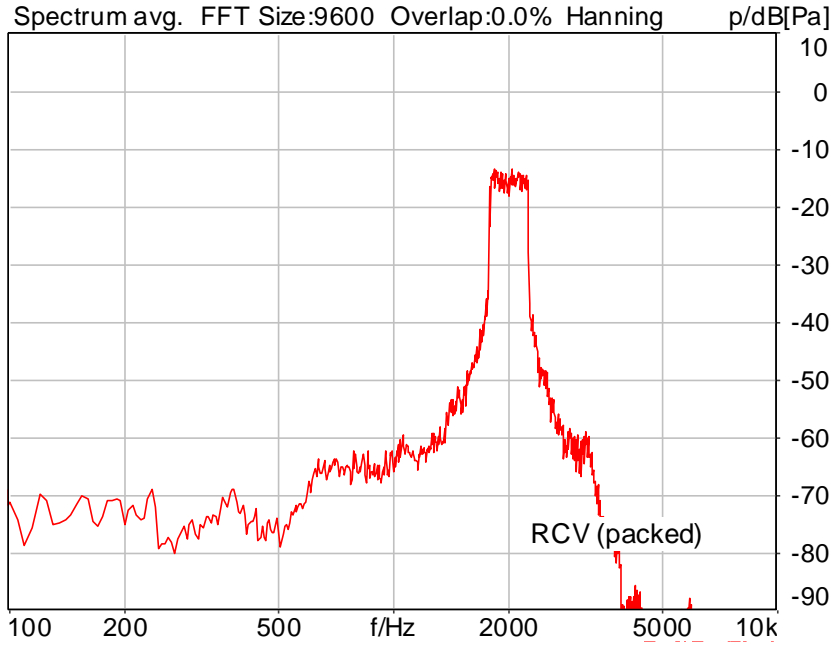
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 27.69 dB (4.13%) Ok

Ok

2023/11/23 下午 07:31 ACQUA 5.1.200

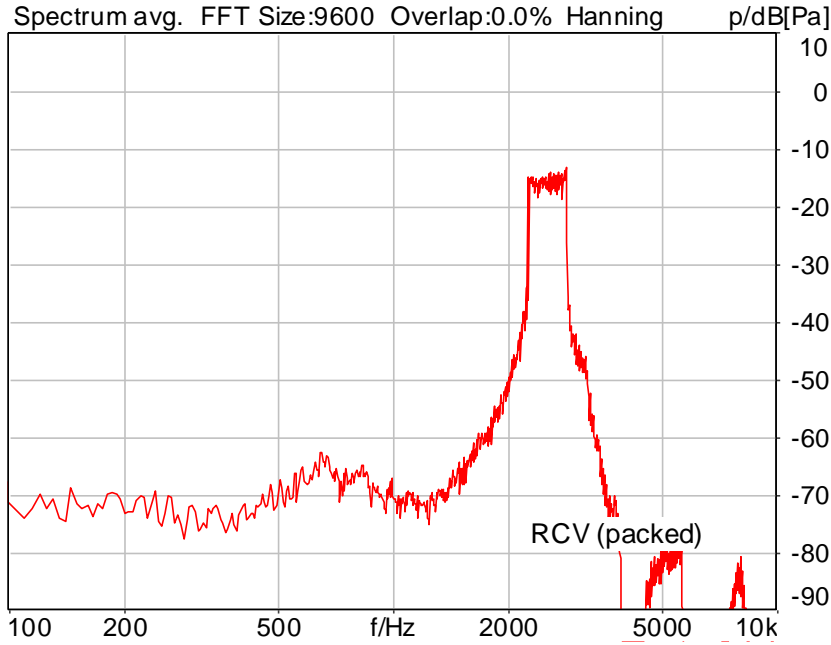
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 27.16 dB (4.39%) Ok

Ok

2023/11/23 下午 07:32 ACQUA 5.1.200

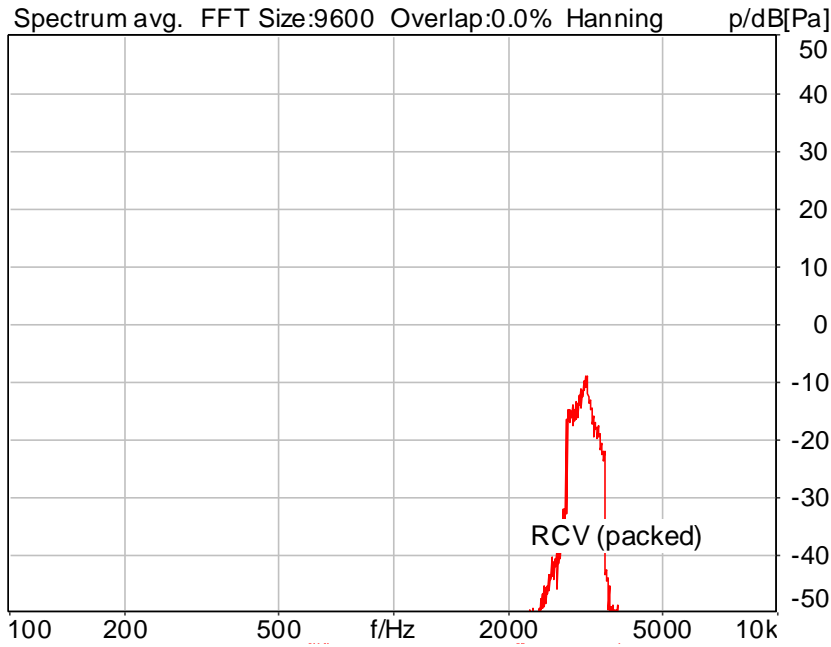
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 26.43 dB (4.77%) Ok

Ok

2023/11/23 下午 07:32 ACQUA 5.1.200

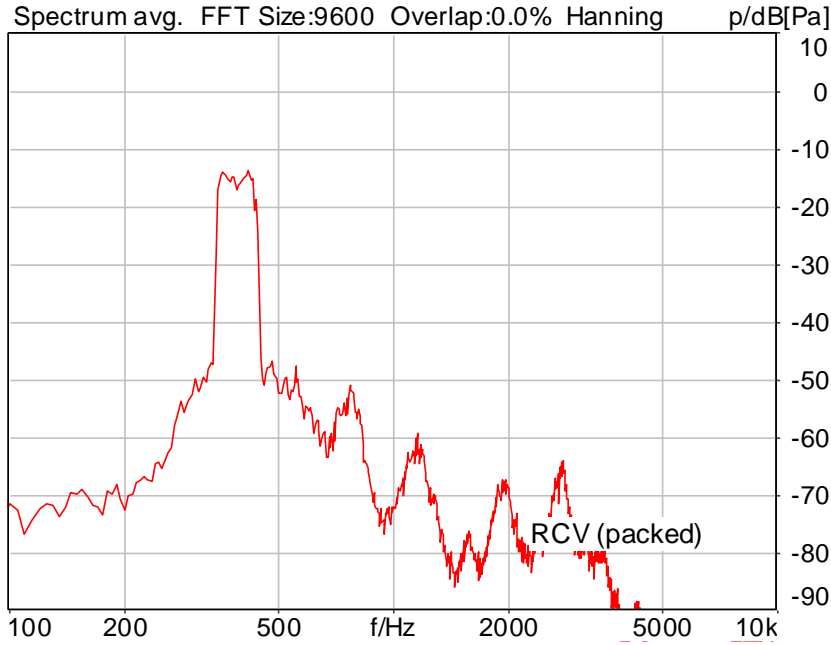
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 400 Hz NB

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



Ok

2023/11/23 下午 07:36 ACQUA 5.1.200

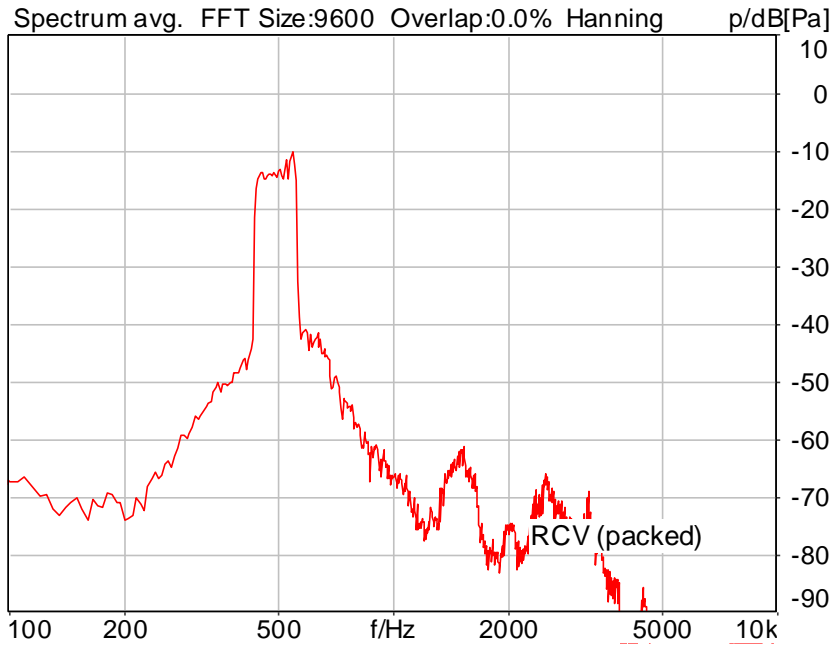
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Ok

2023/11/23 下午 07:36 ACQUA 5.1.200

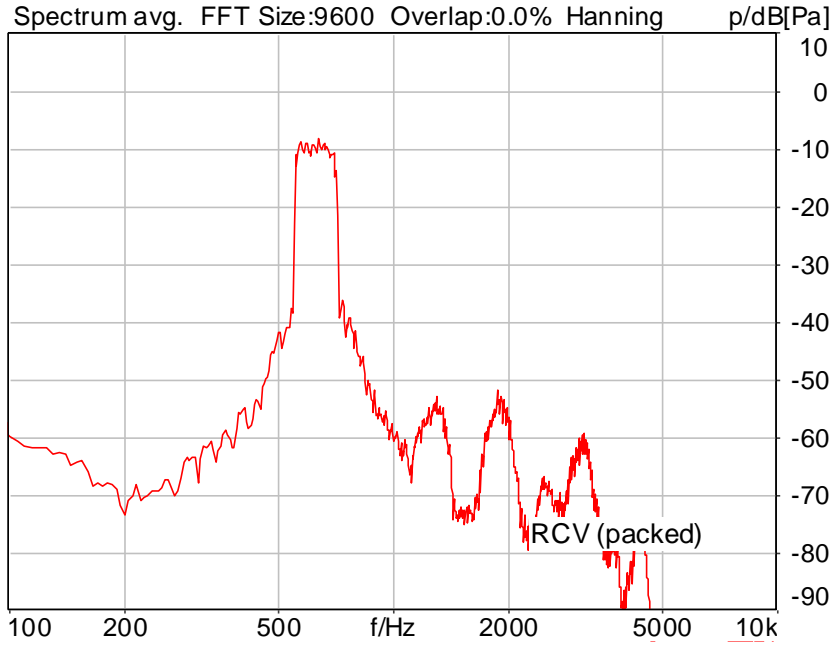
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 32.92 dB (2.26%) Ok

Ok

2023/11/23 下午 07:37 ACQUA 5.1.200

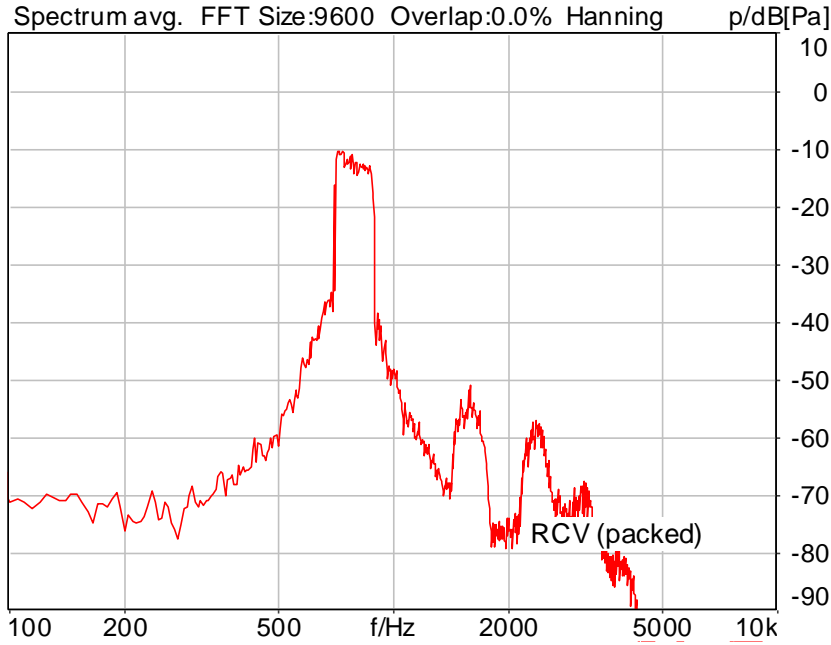
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 30.94 dB (2.84%) Ok

Ok

2023/11/23 下午 07:37 ACQUA 5.1.200

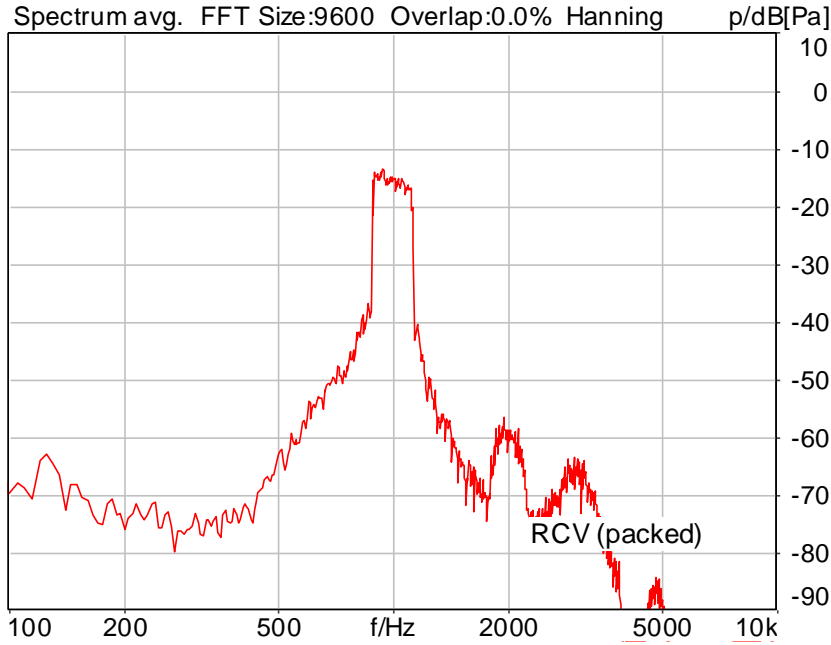
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



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

Ok

2023/11/23 下午 07:38 ACQUA 5.1.200

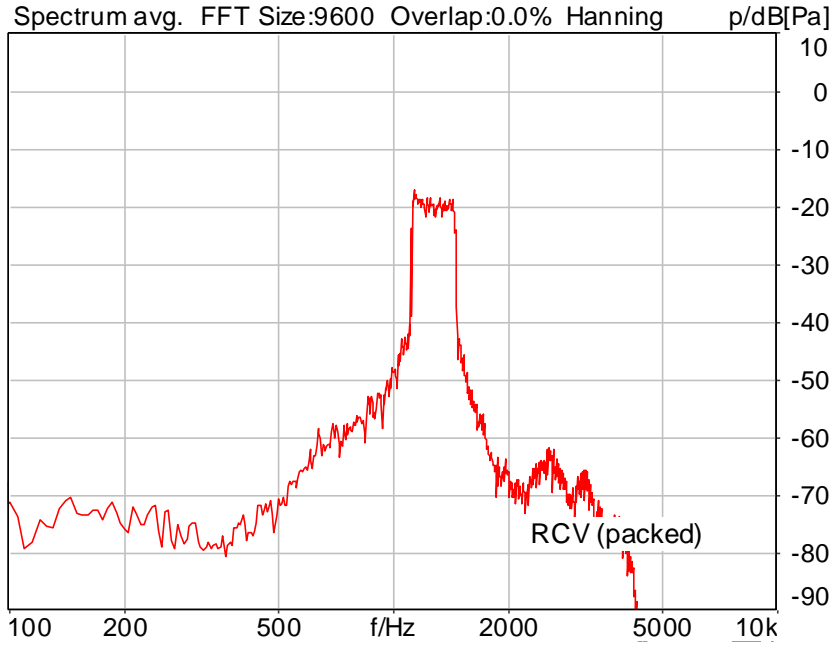
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 25.93 dB (5.05%) Ok

Ok

2023/11/23 下午 07:38 ACQUA 5.1.200

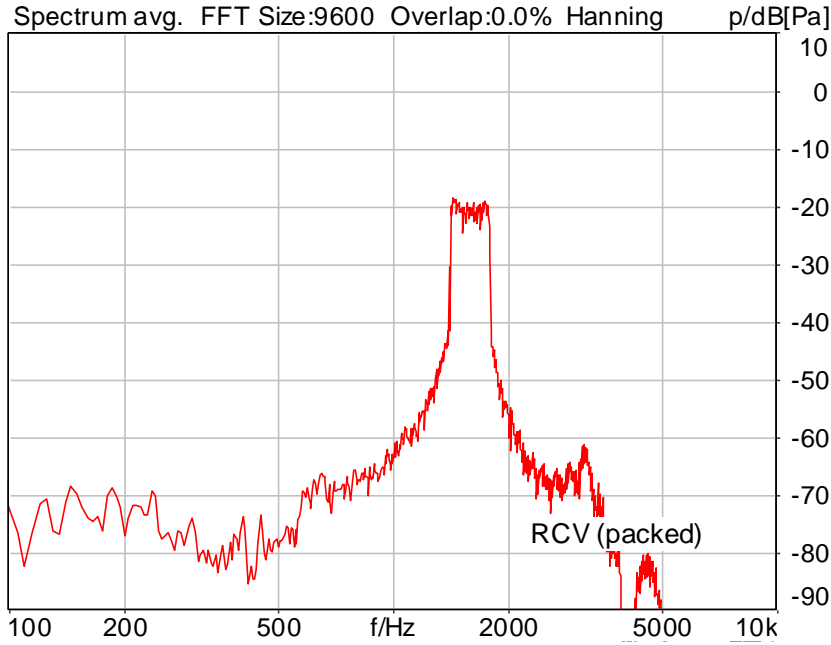
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 27.72 dB (4.11%) Ok

Ok

2023/11/23 下午 07:39 ACQUA 5.1.200

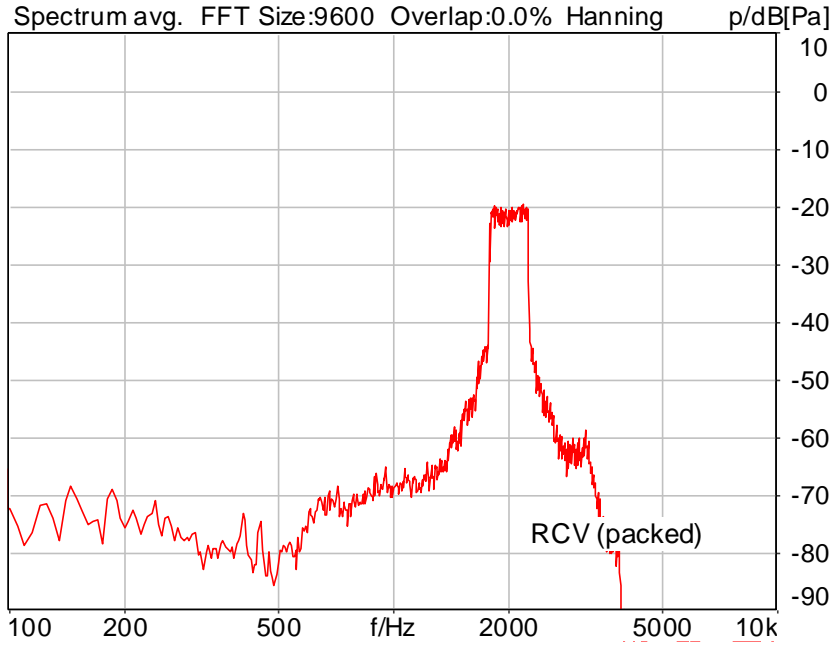
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 26.36 dB (4.81%) Ok

Ok

2023/11/23 下午 07:39 ACQUA 5.1.200

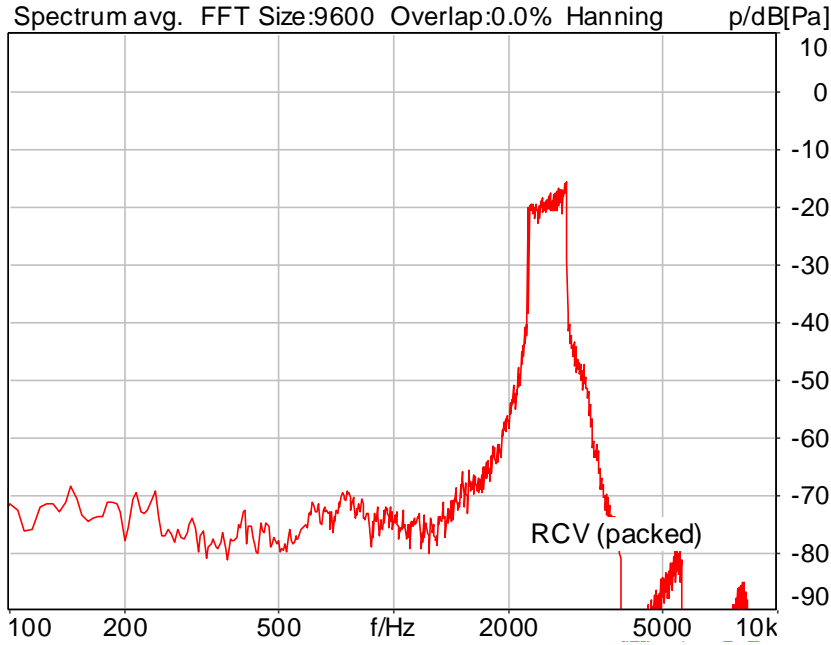
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



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

Ok

2023/11/23 下午 07:40 ACQUA 5.1.200

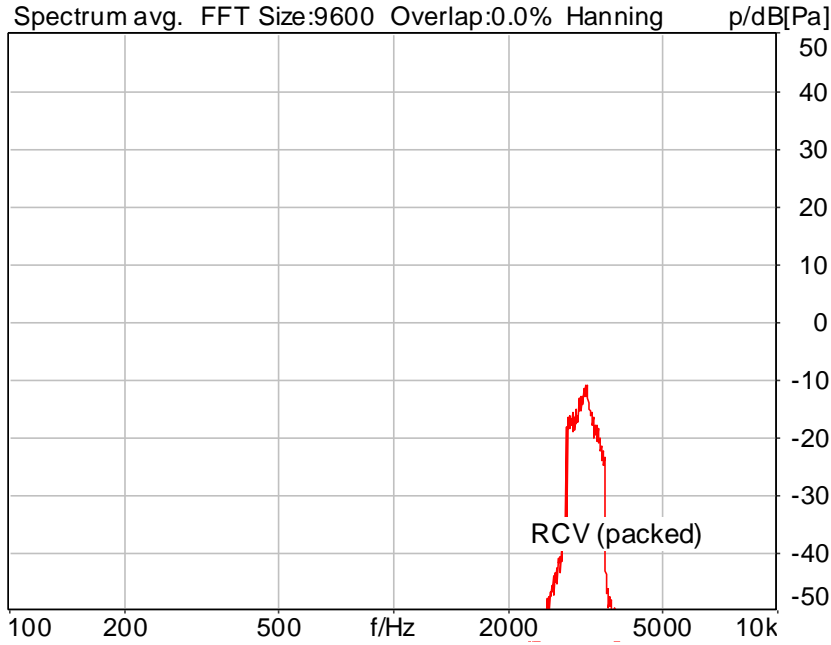
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 27.62 dB (4.16%) Ok

Ok

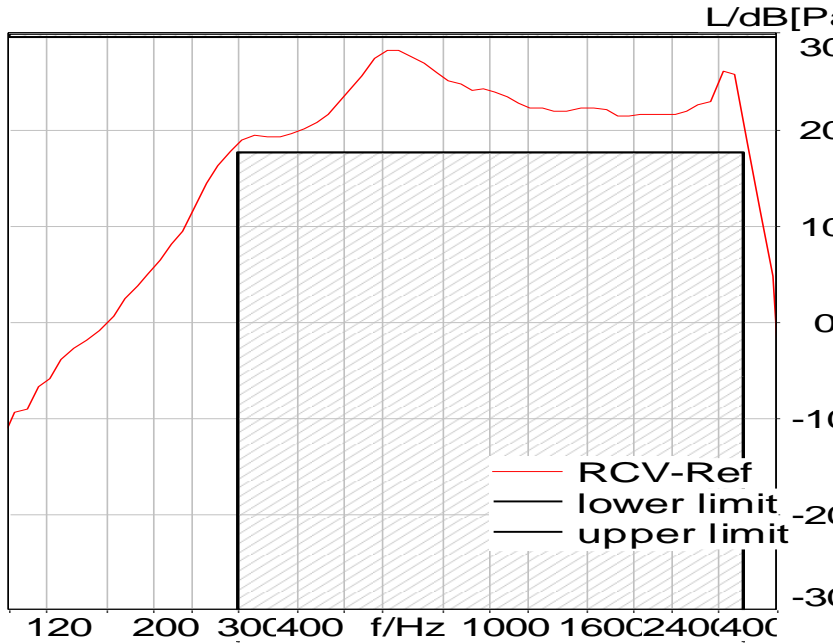
2023/11/23 下午 07:40 ACQUA 5.1.200

Limits

	lower
Run 1	20.00 dB

5.3 Frequency Response 8N FF HANB

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



Absolute minimal distance
1.39 dB at 649.1 Hz Ok

Ok

2023/11/23 下午 07:33 ACQUA 5.1.200

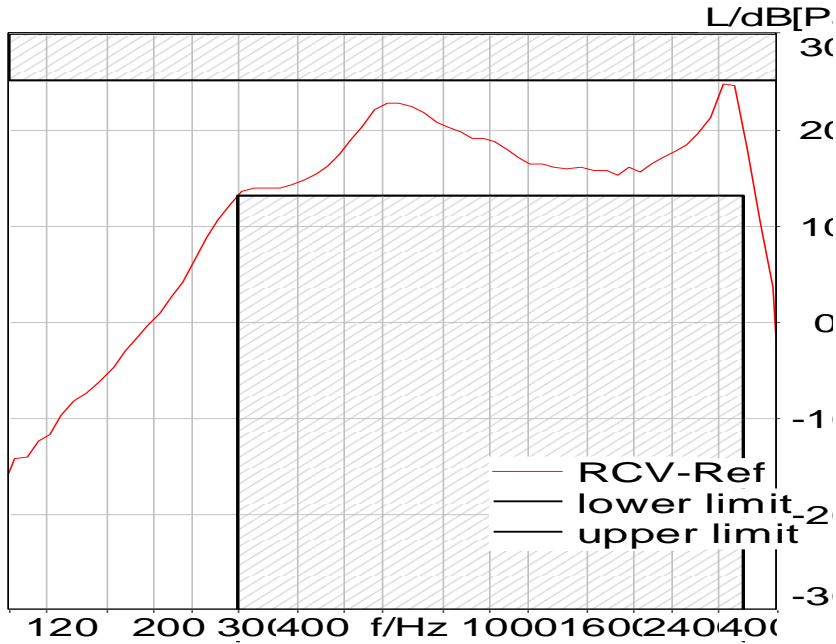
Limits

	lower
Run 1	Fit into tolerance



5.3 Frequency Response 2N FF HANB

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



Absolute minimal distance
0.39 dB at 3058.6 Hz Ok

Ok

2023/11/23 下午 07:41 ACQUA 5.1.200

Limits

	lower
Run 1	Fit into tolerance



#2 WCDMA V AMR NB 12.2kbps

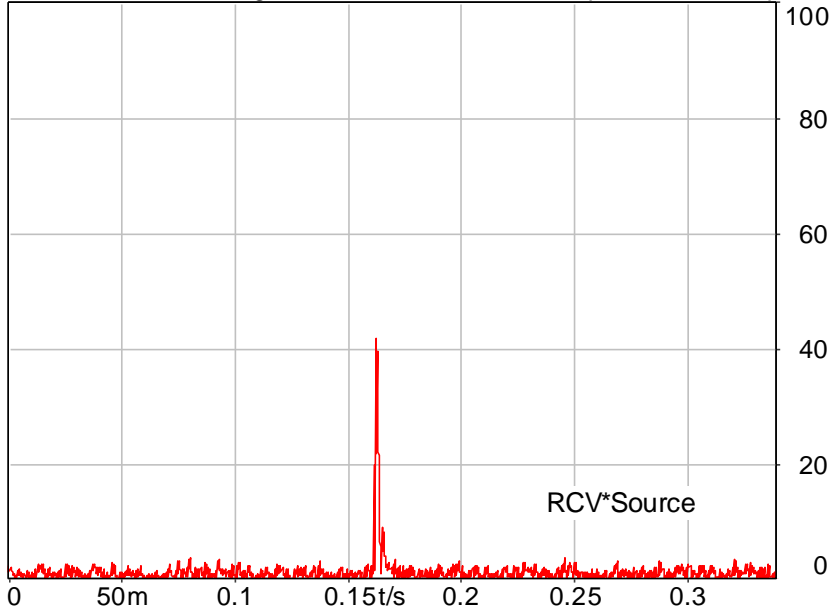
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	162.4
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	95.81
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	91.88
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.25
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.09
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.00
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.87
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.07
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.12
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.56
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.53
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.52
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.12
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.93
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.51
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.97
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.44
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.43
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.73
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.66
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.11
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.02
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.52
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 611.7 Hz	1.45
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3058.6 Hz	0.42



Overall Receive Delay NB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %

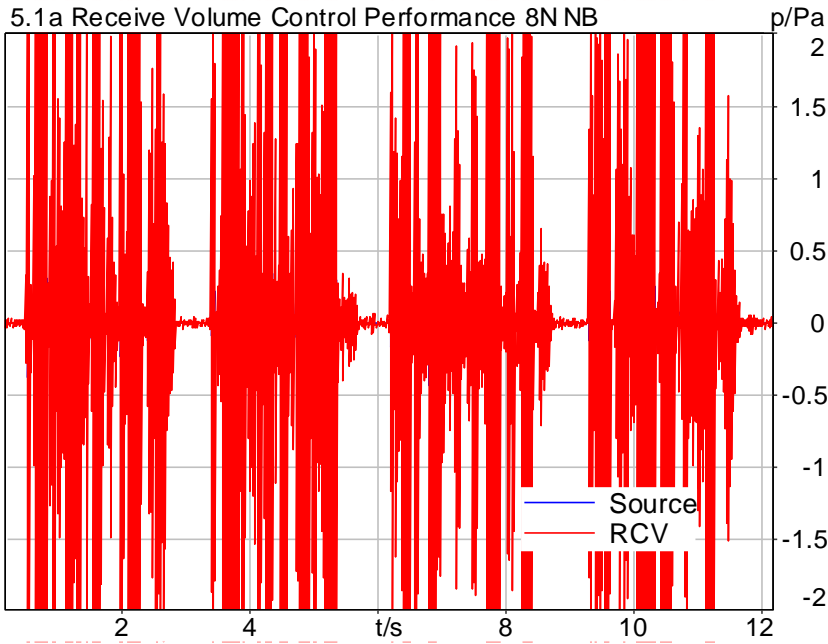


Delay (Cross): 162.4 ms

2023/11/24 上午 11:55 ACQUA 5.1.200

5.1a Receive Volume Control Performance 8N NB

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



Speech Level RCV: 95.81 dB[SPL], Act.: 64.43% Ok

Ok

2023/11/24 上午 11:55 ACQUA 5.1.200

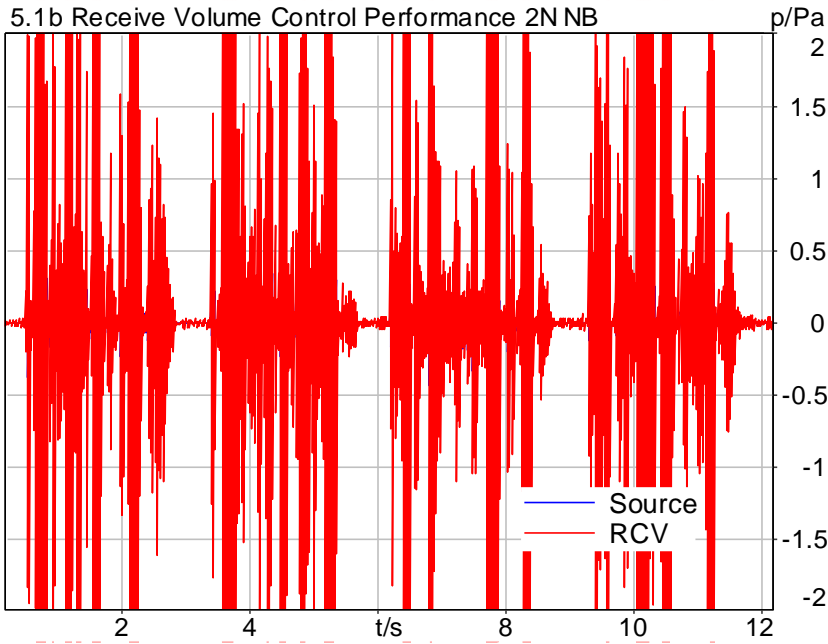
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Speech Level RCV: 91.88 dB[SPL], Act.: 49.83% Ok

Ok

2023/11/24 上午 11:56 ACQUA 5.1.200

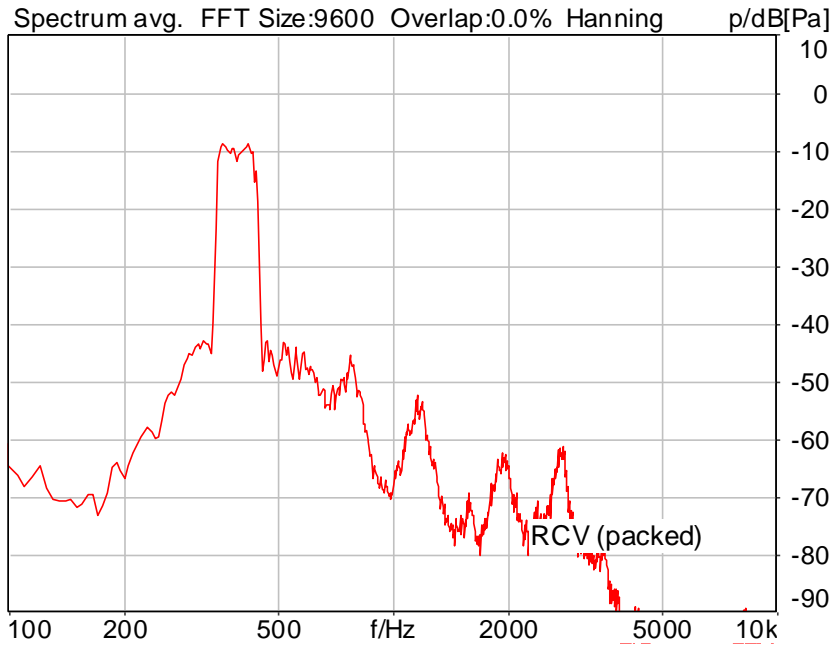
Limits

	lower
Run 1	76.00 dB20uPa



5.2 RCV Distortion and Noise - 400 Hz NB

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



Ok

2023/11/24 上午 11:57 ACQUA 5.1.200

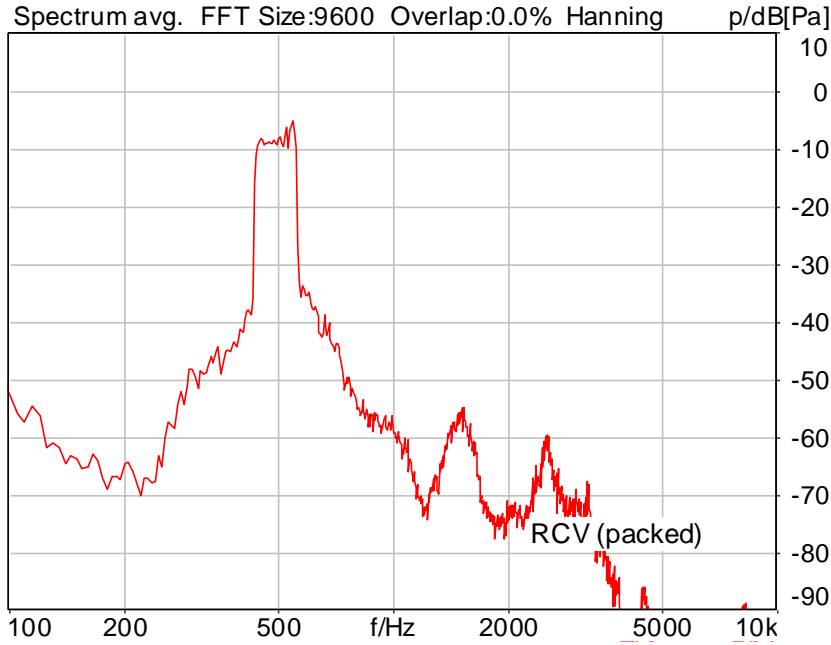
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Distortion (Noise) RCV (packed): 32.09 dB (2.49%) Ok

Ok

2023/11/24 上午 11:57 ACQUA 5.1.200

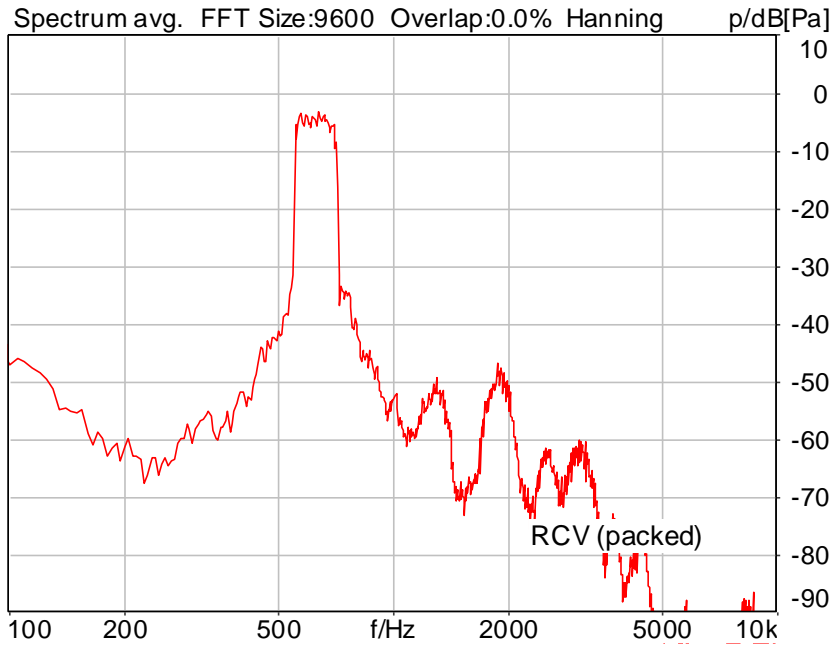
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 34.00 dB (2.00%) Ok

Ok

2023/11/24 上午 11:58 ACQUA 5.1.200

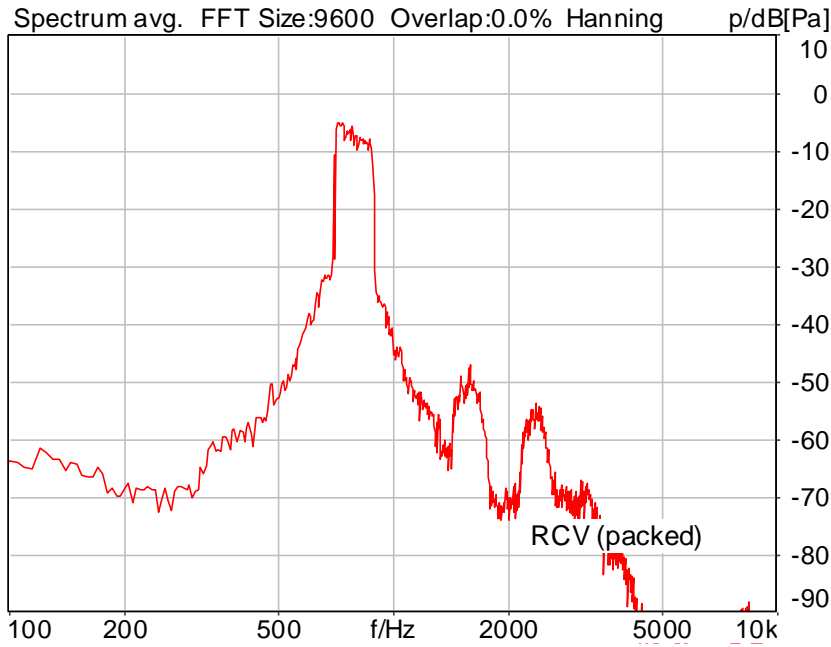
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 29.87 dB (3.21%) Ok

Ok

2023/11/24 上午 11:58 ACQUA 5.1.200

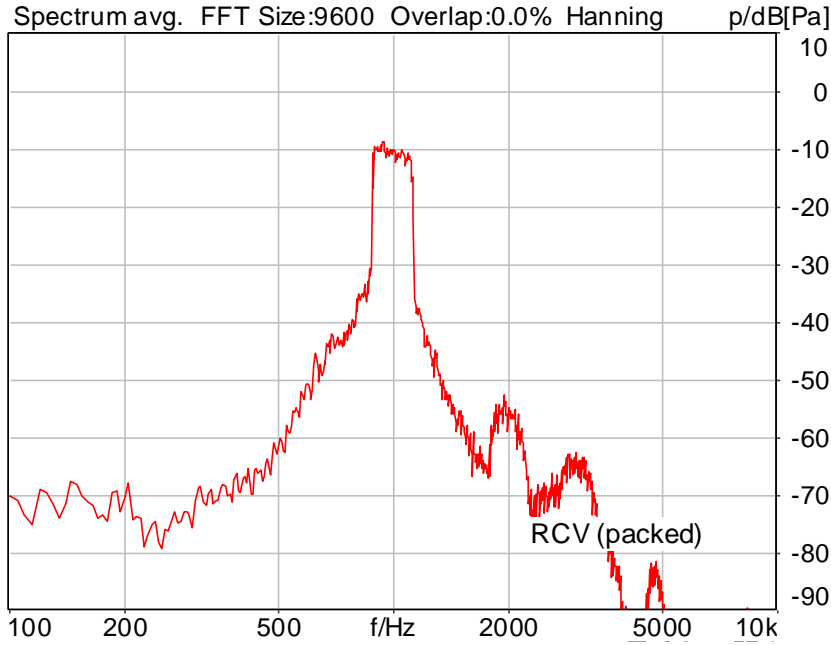
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Distortion (Noise) RCV (packed): 28.07 dB (3.95%) Ok

Ok

2023/11/24 上午 11:59 ACQUA 5.1.200

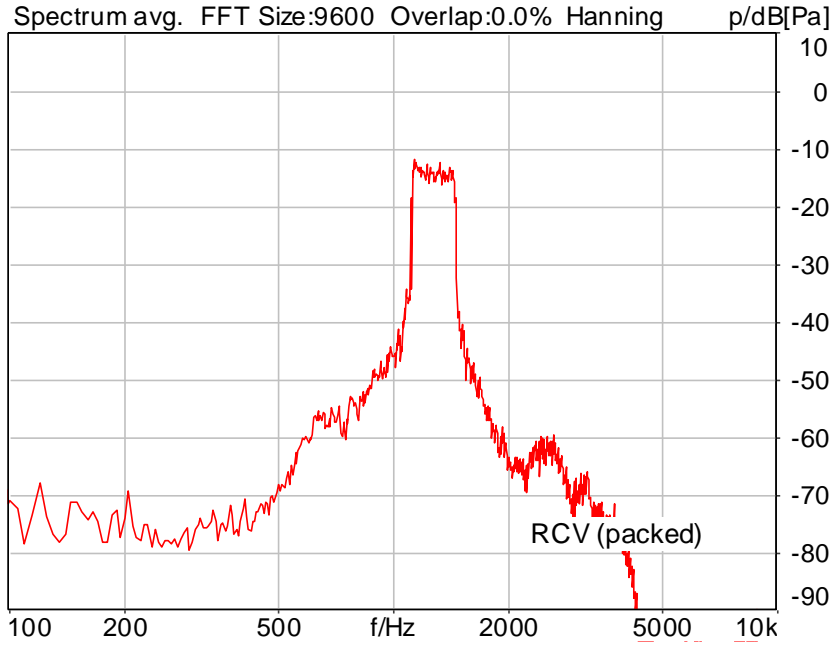
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 27.12 dB (4.41%) Ok

Ok

2023/11/24 上午 11:59 ACQUA 5.1.200

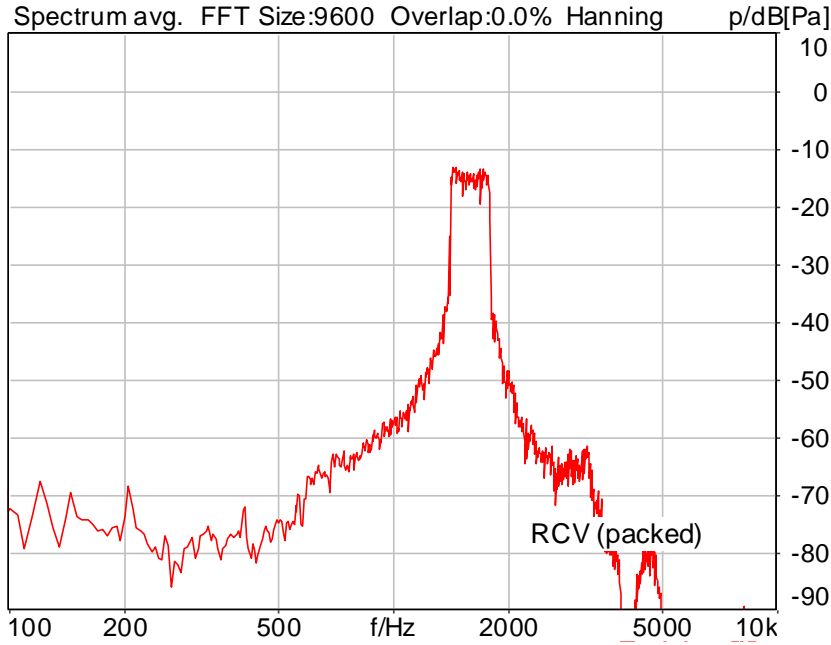
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 27.56 dB (4.19%) Ok

Ok

2023/11/24 下午 12:00 ACQUA 5.1.200

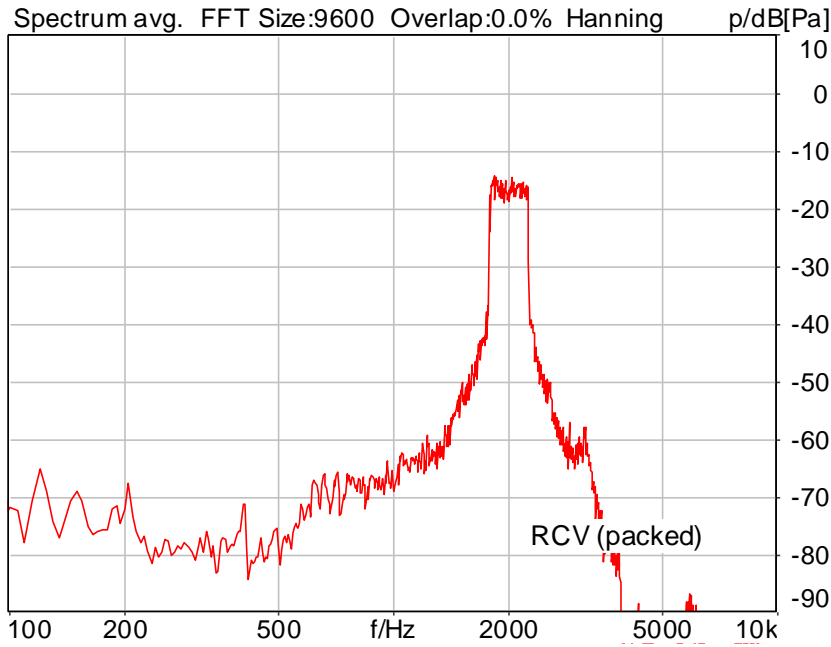
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



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

Ok

2023/11/24 下午 12:00 ACQUA 5.1.200

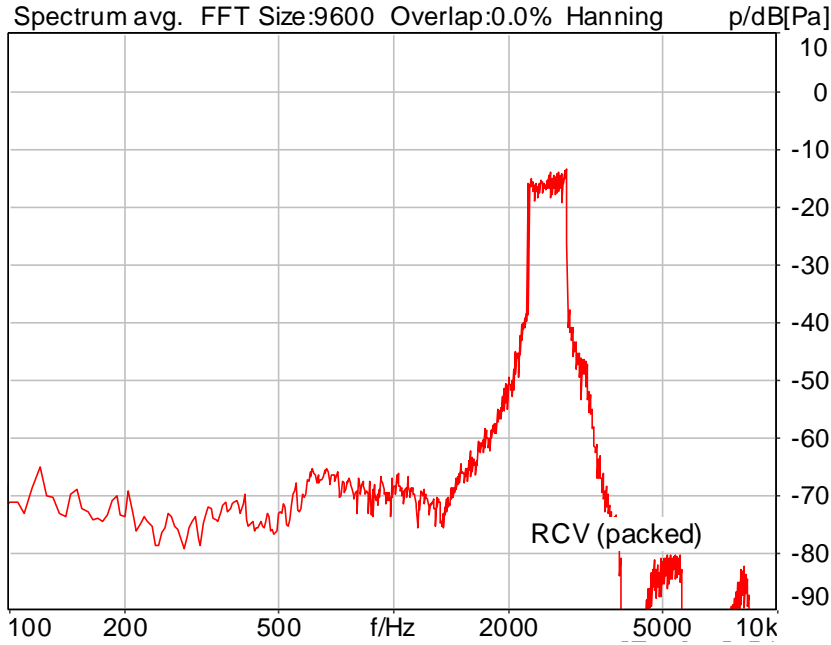
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 27.52 dB (4.21%) Ok

Ok

2023/11/24 下午 12:01 ACQUA 5.1.200

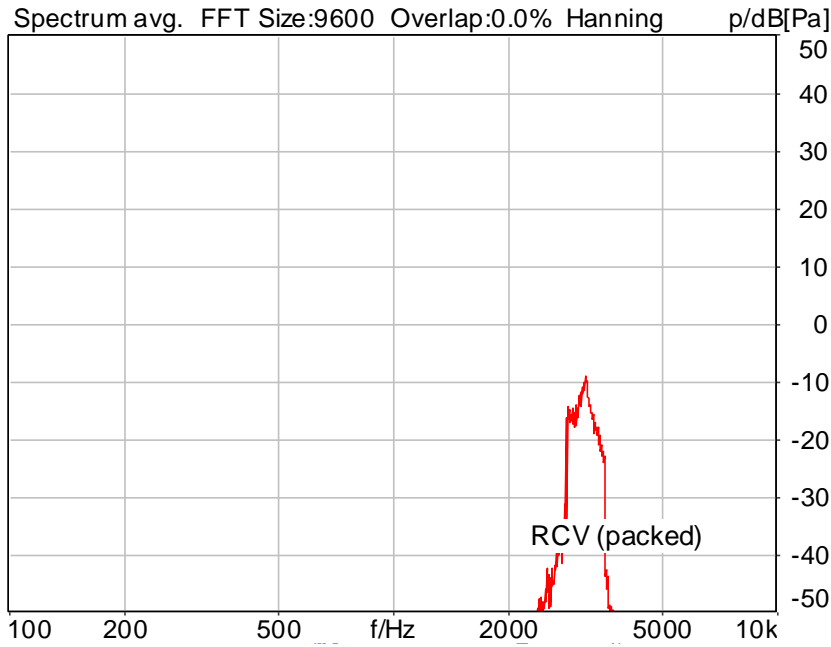
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



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

Ok

2023/11/24 下午 12:01 ACQUA 5.1.200

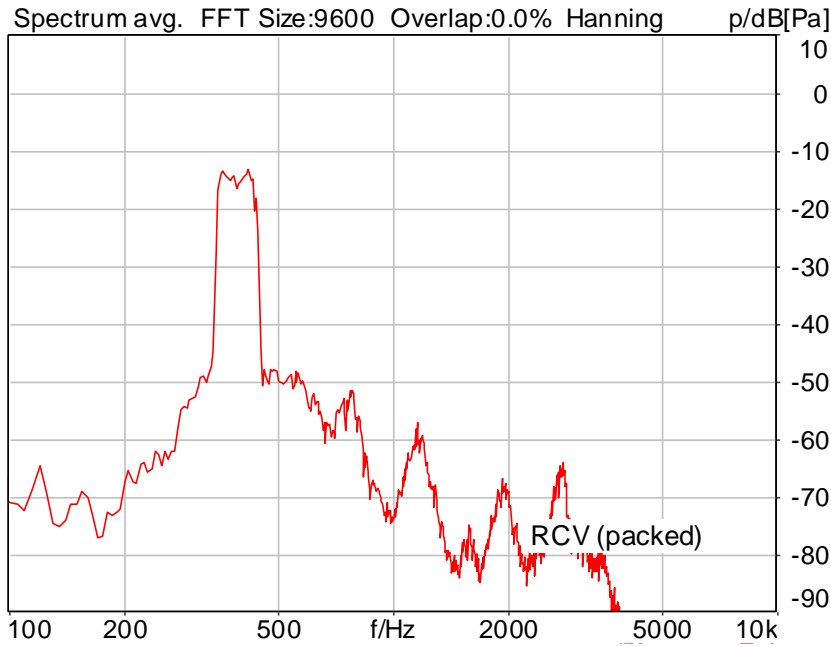
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 400 Hz NB

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



Distortion (Noise) RCV (packed): 32.93 dB (2.26%) Ok

Ok

2023/11/24 下午 12:02 ACQUA 5.1.200

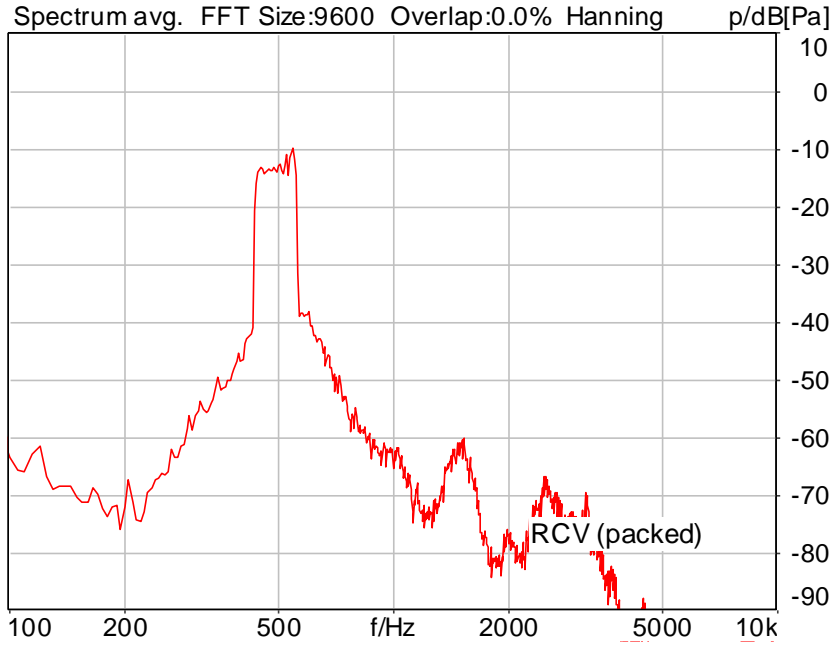
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



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

Ok

2023/11/24 下午 12:03 ACQUA 5.1.200

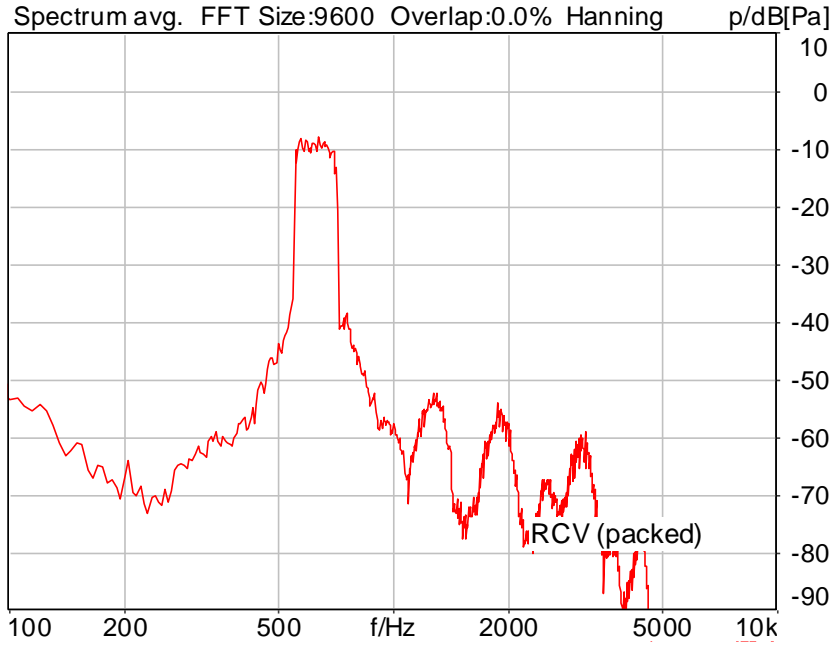
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 33.97 dB (2.00%) Ok

Ok

2023/11/24 下午 12:03 ACQUA 5.1.200

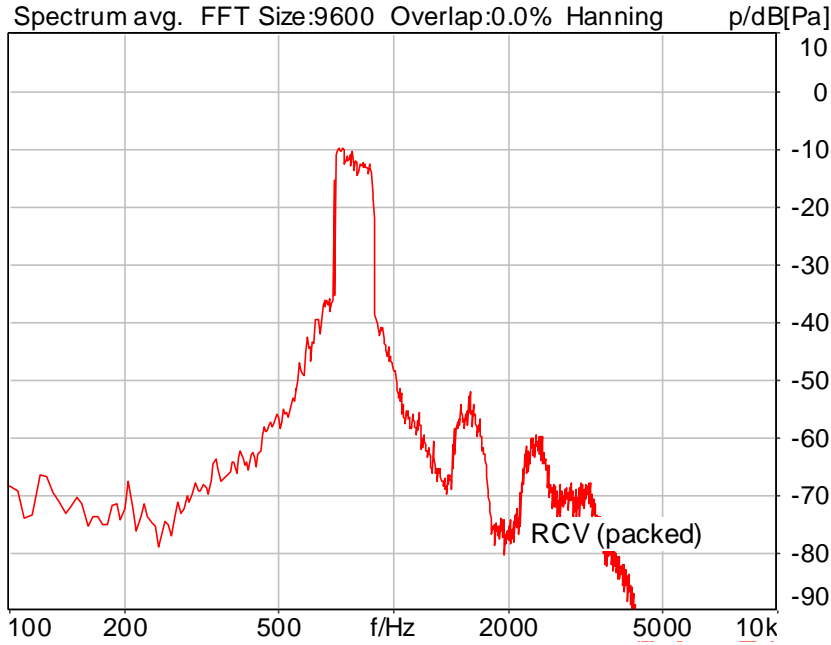
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 30.44 dB (3.01%) Ok

Ok

2023/11/24 下午 12:04 ACQUA 5.1.200

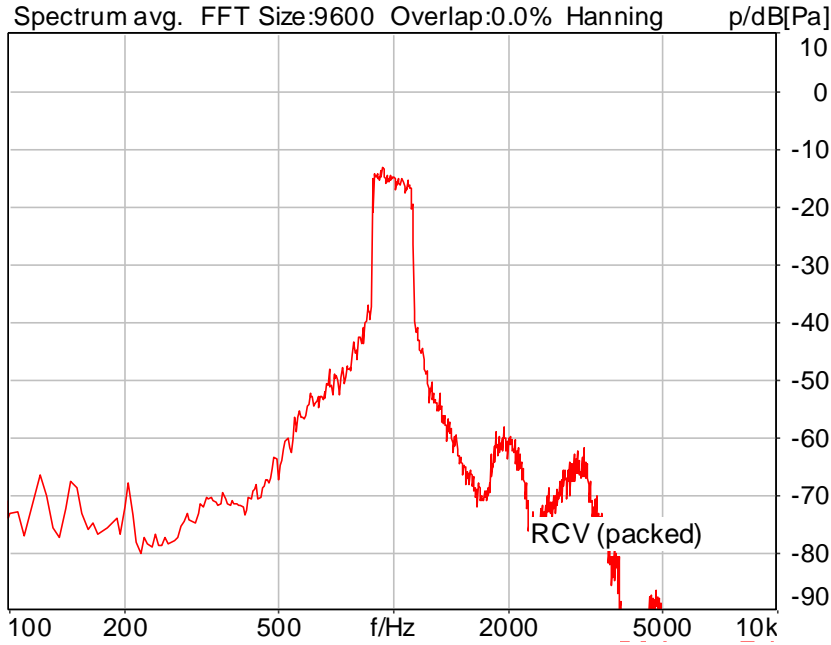
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Distortion (Noise) RCV (packed): 29.43 dB (3.38%) Ok

Ok

2023/11/24 下午 12:04 ACQUA 5.1.200

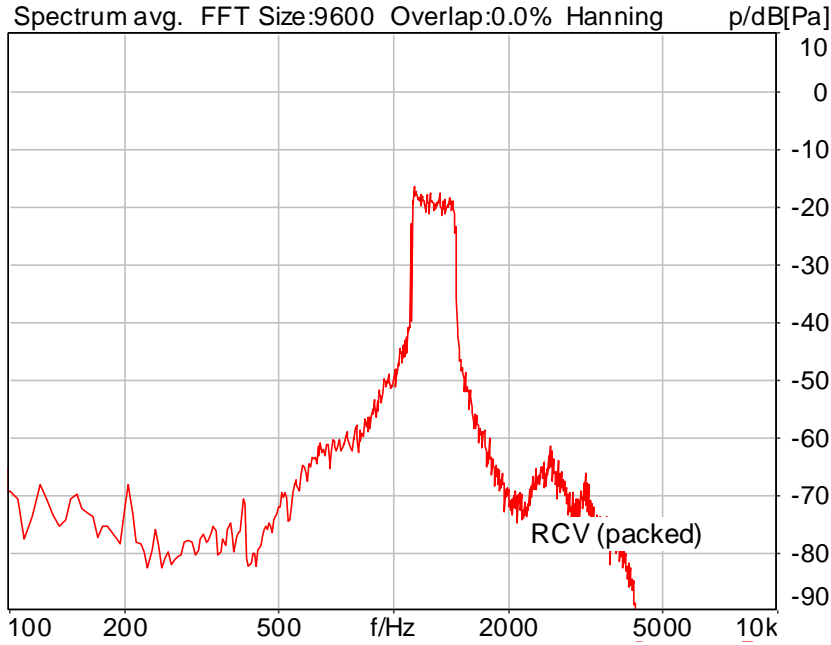
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 26.73 dB (4.61%) Ok

Ok

2023/11/24 下午 12:05 ACQUA 5.1.200

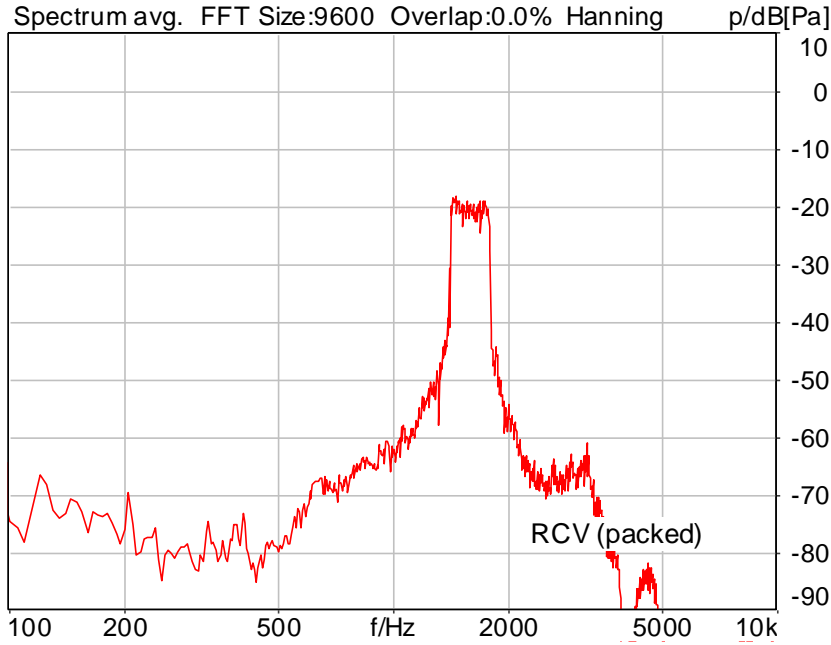
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 27.66 dB (4.14%) Ok

Ok

2023/11/24 下午 12:05 ACQUA 5.1.200

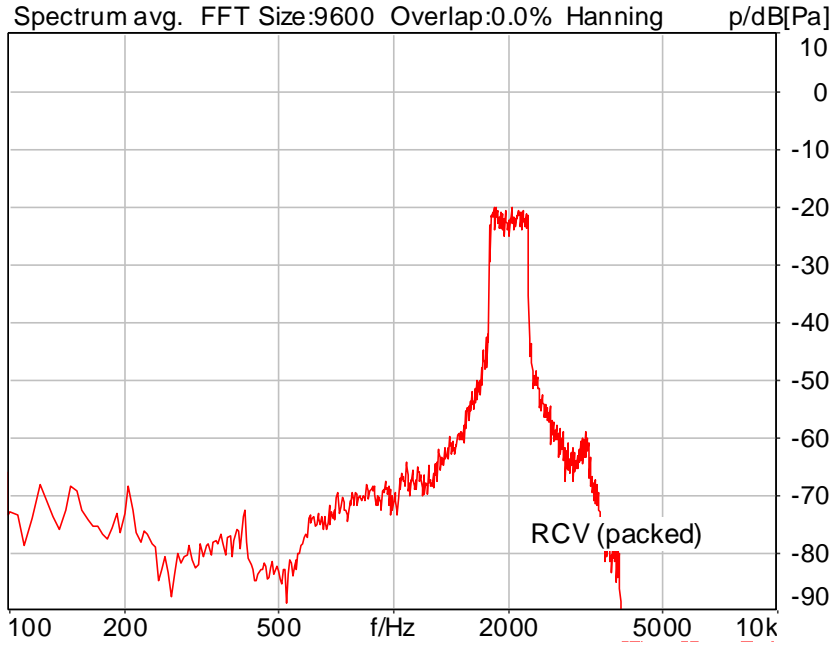
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 27.11 dB (4.41%) Ok

Ok

2023/11/24 下午 12:06 ACQUA 5.1.200

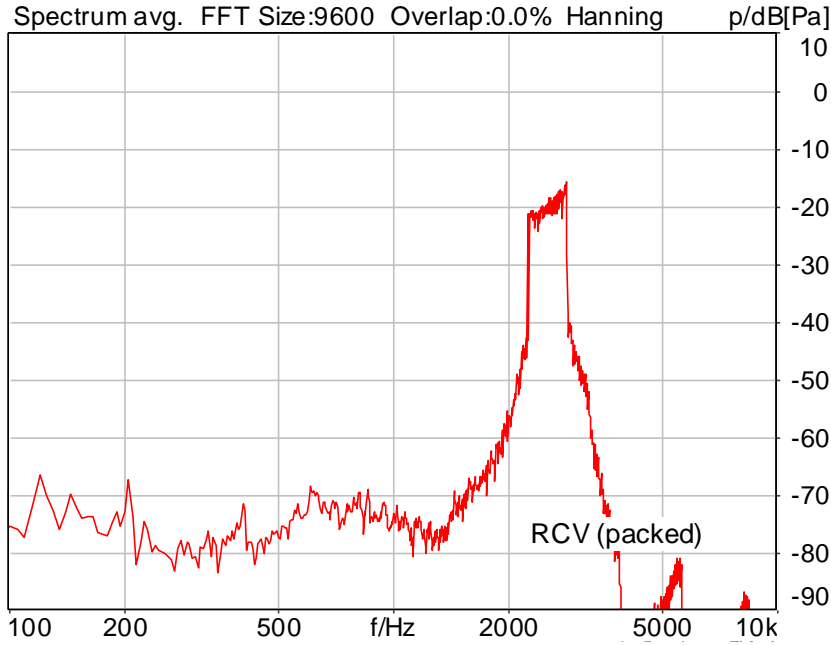
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 26.02 dB (5.00%) Ok

Ok

2023/11/24 下午 12:06 ACQUA 5.1.200

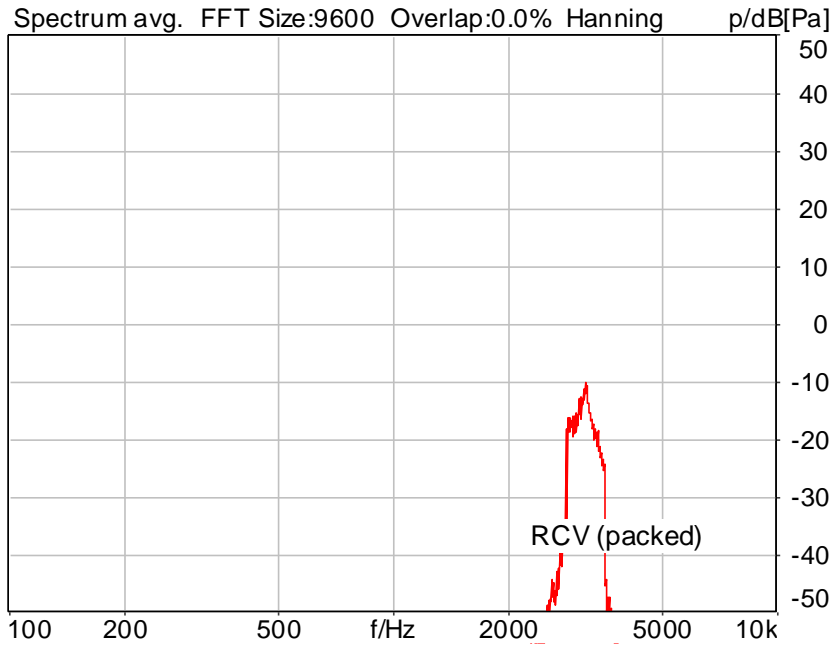
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 28.52 dB (3.75%) Ok

Ok

2023/11/24 下午 12:06 ACQUA 5.1.200

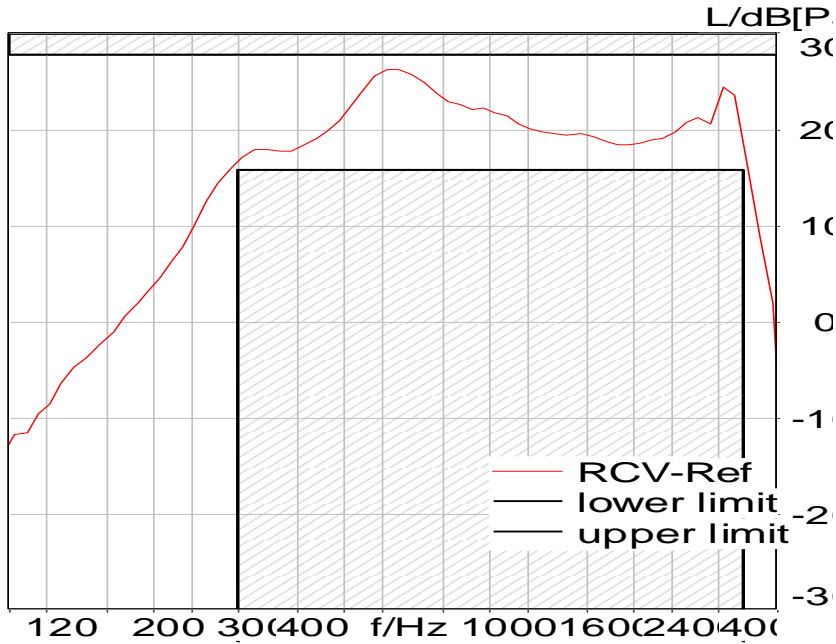
Limits

	lower
Run 1	20.00 dB



5.3 Frequency Response 8N FF HANB

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



Absolute minimal distance
1.45 dB at 611.7 Hz Ok

Ok

2023/11/24 下午 12:07 ACQUA 5.1.200

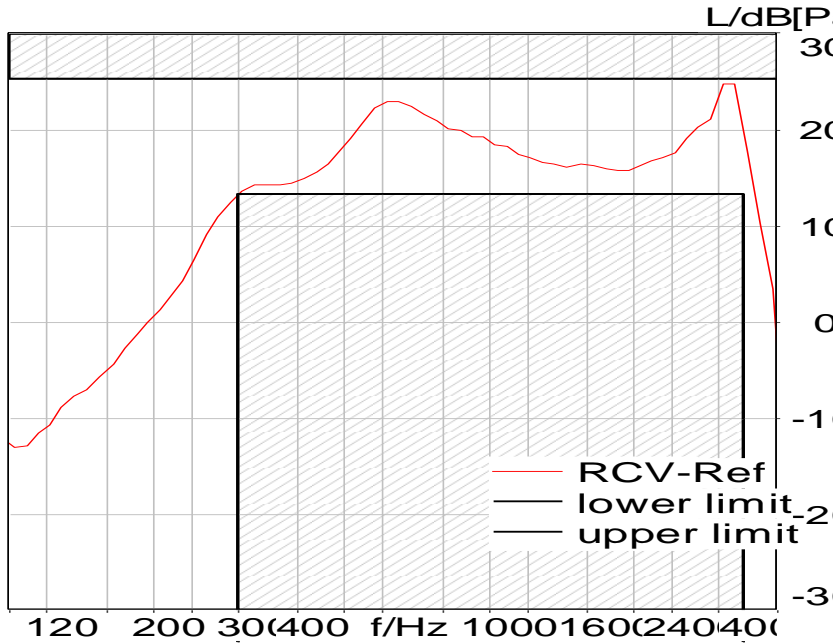
Limits

	lower
Run 1	Fit into tolerance



5.3 Frequency Response 2N FF HANB

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



Absolute minimal distance
0.42 dB at 3058.6 Hz Ok

Ok

2023/11/24 下午 01:35 ACQUA 5.1.200

Limits

	lower
Run 1	Fit into tolerance



#3 LTE B66 AMR NB 12.2kbps

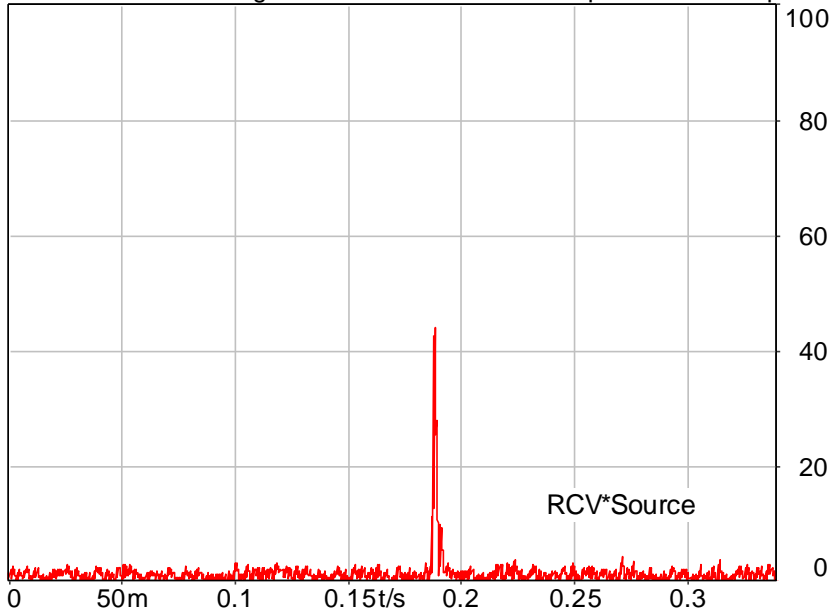
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	188.5
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	96.17
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	91.47
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	23.31
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	22.97
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	22.94
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.78
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.78
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.68
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.68
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.24
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	23.72
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	23.43
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.29
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.51
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.30
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.79
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.50
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.67
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.27
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.63
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.48
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.98
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 611.7 Hz	1.19
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3058.6 Hz	0.27



Overall Receive Delay NB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



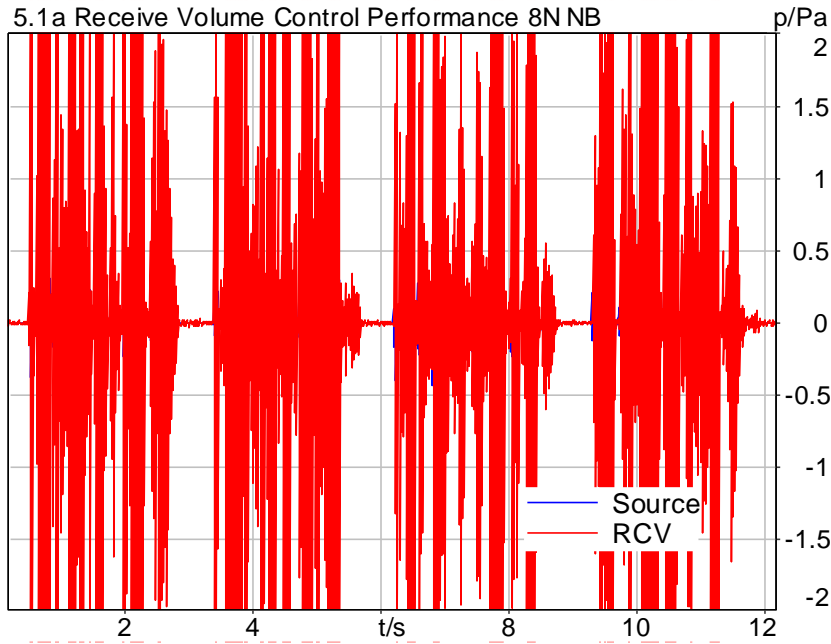
Delay (Cross): 188.5 ms

2023/11/24 上午 12:52 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N NB

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



Speech Level RCV: 96.17 dB[SPL], Act.: 64.74% Ok

Ok

2023/11/24 上午 12:14 ACQUA 5.1.200

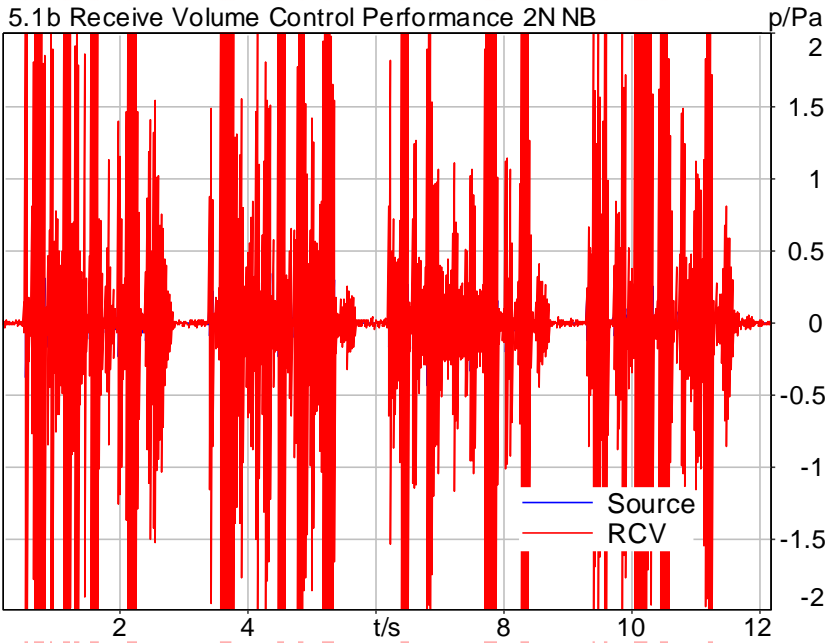
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Speech Level RCV: 91.47 dB[SPL], Act.: 52.87% Ok

Ok

2023/11/24 上午 01:00 ACQUA 5.1.200

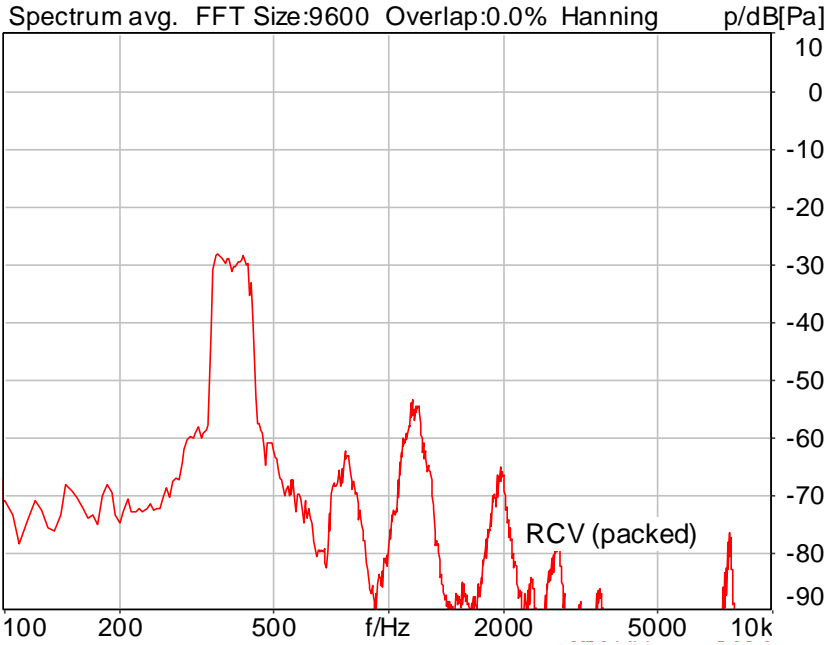
Limits

	lower
Run 1	76.00 dB20uPa



5.2 RCV Distortion and Noise - 400 Hz NB

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



Distortion (Noise) RCV (packed): 23.31 dB (6.83%) Ok

Ok

2023/11/24 上午 12:15 ACQUA 5.1.200

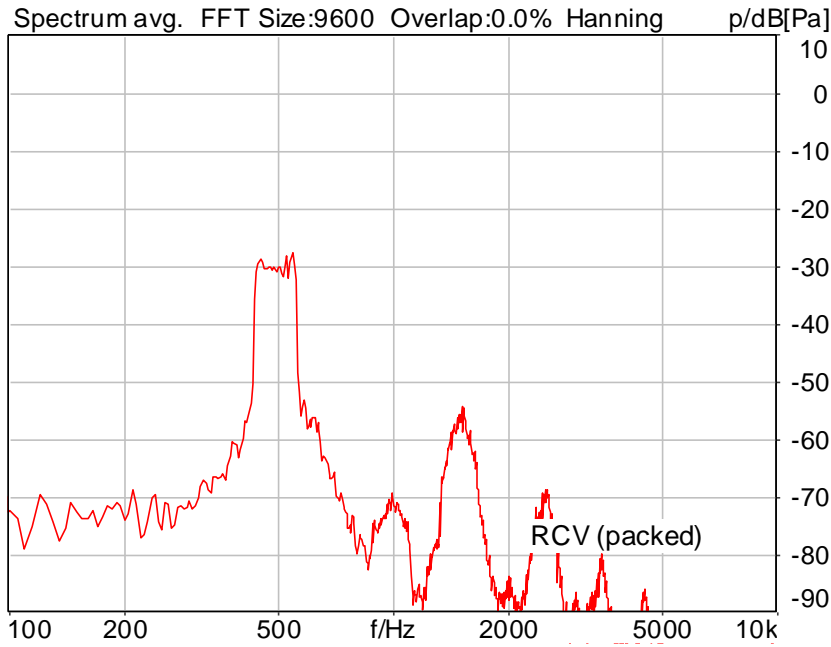
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Distortion (Noise) RCV (packed): 22.97 dB (7.11%) Ok

Ok

2023/11/24 上午 12:16 ACQUA 5.1.200

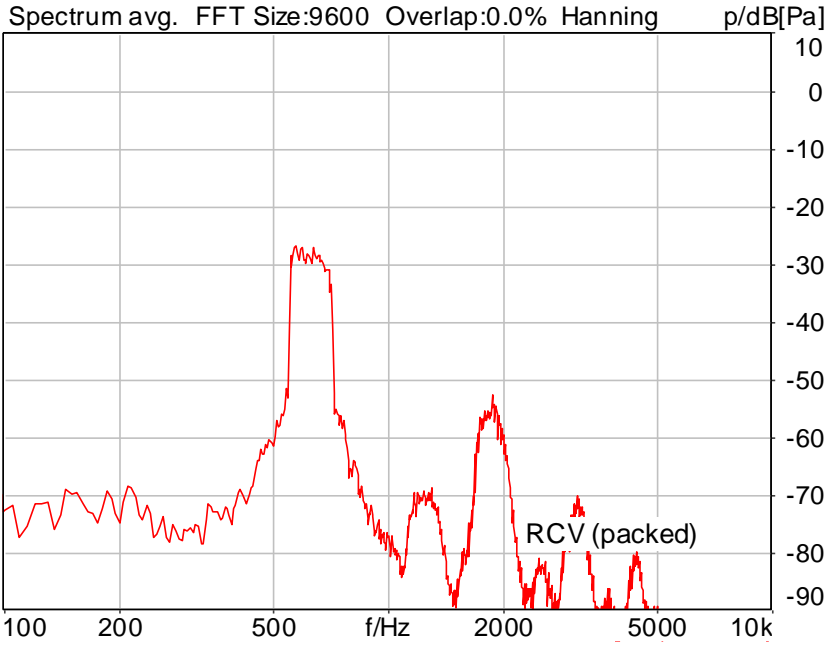
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 22.94 dB (7.13%) Ok

Ok

2023/11/24 上午 12:16 ACQUA 5.1.200

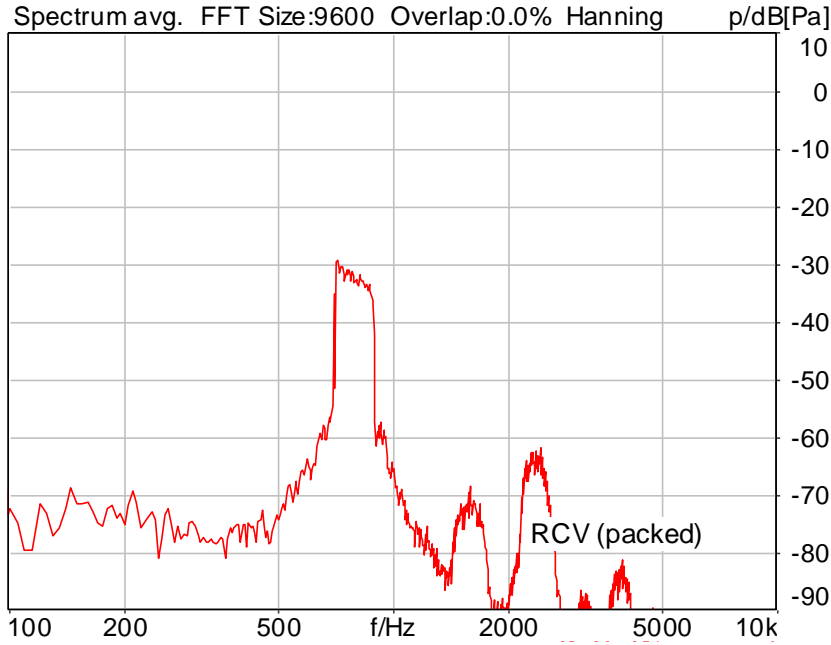
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 25.78 dB (5.14%) Ok

Ok

2023/11/24 上午 12:17 ACQUA 5.1.200

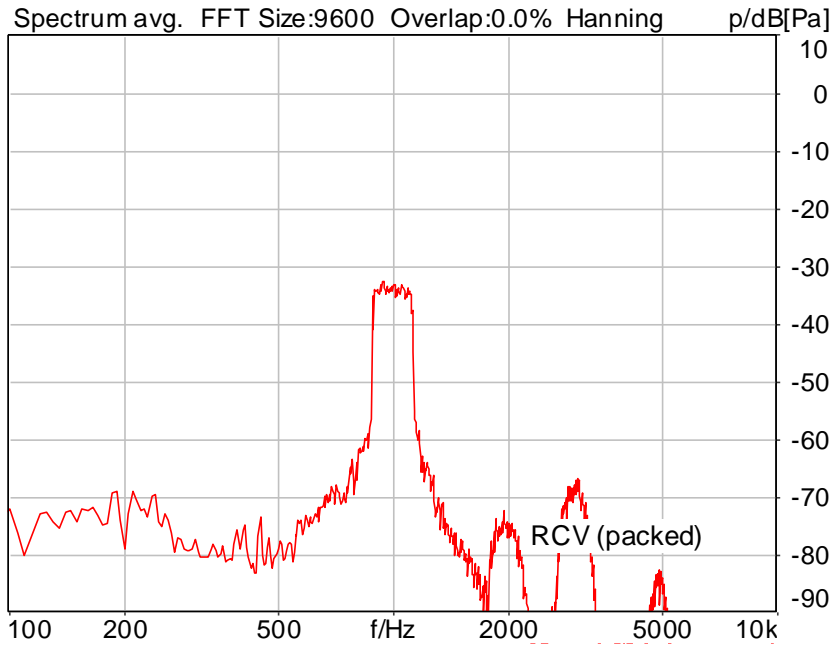
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Ok

2023/11/24 上午 12:17 ACQUA 5.1.200

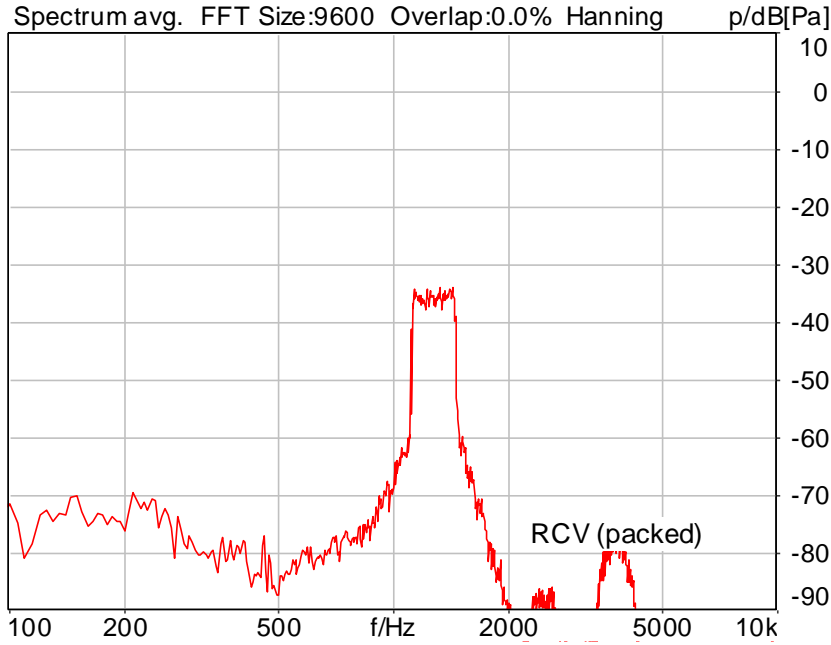
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 25.68 dB (5.20%) Ok

Ok

2023/11/24 上午 12:18 ACQUA 5.1.200

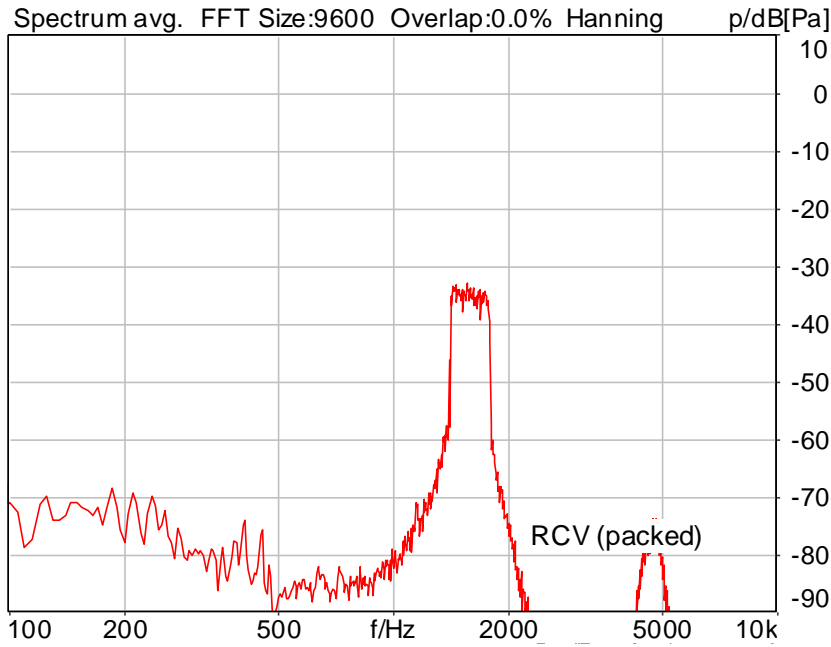
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



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

Ok

2023/11/24 上午 12:18 ACQUA 5.1.200

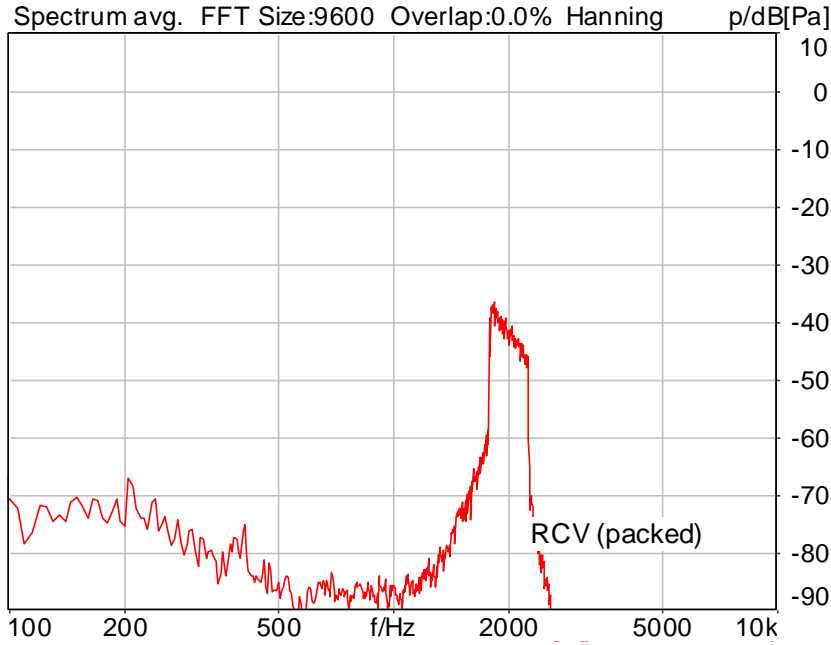
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 26.24 dB (4.88%) Ok

Ok

2023/11/24 上午 12:19 ACQUA 5.1.200

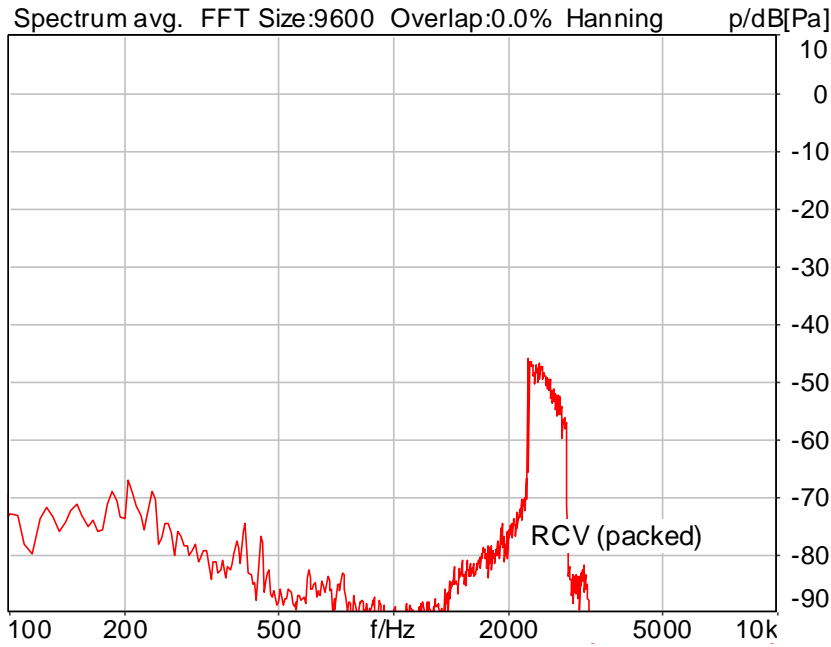
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 23.72 dB (6.51%) Ok

Ok

2023/11/24 上午 12:19 ACQUA 5.1.200

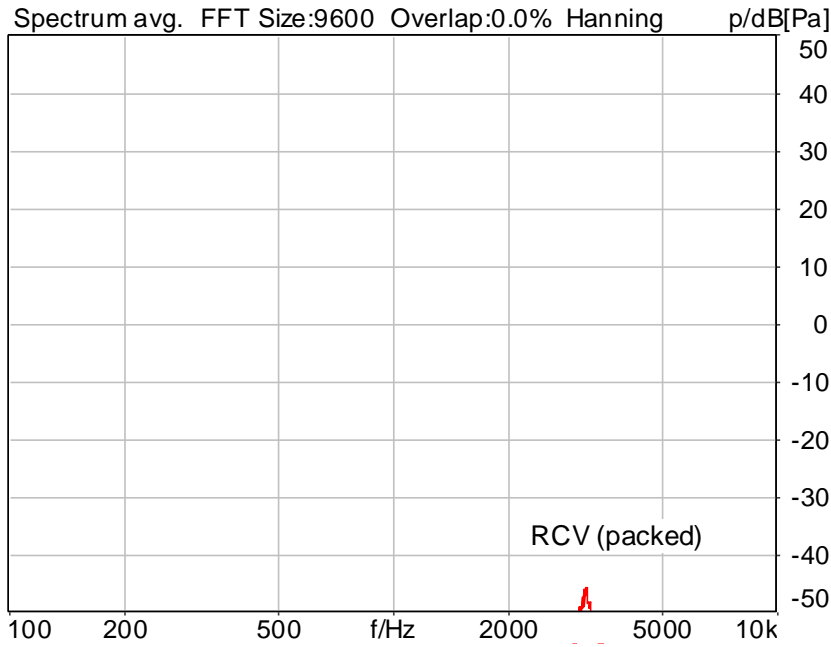
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 23.43 dB (6.74%) Ok

Ok

2023/11/24 上午 12:20 ACQUA 5.1.200

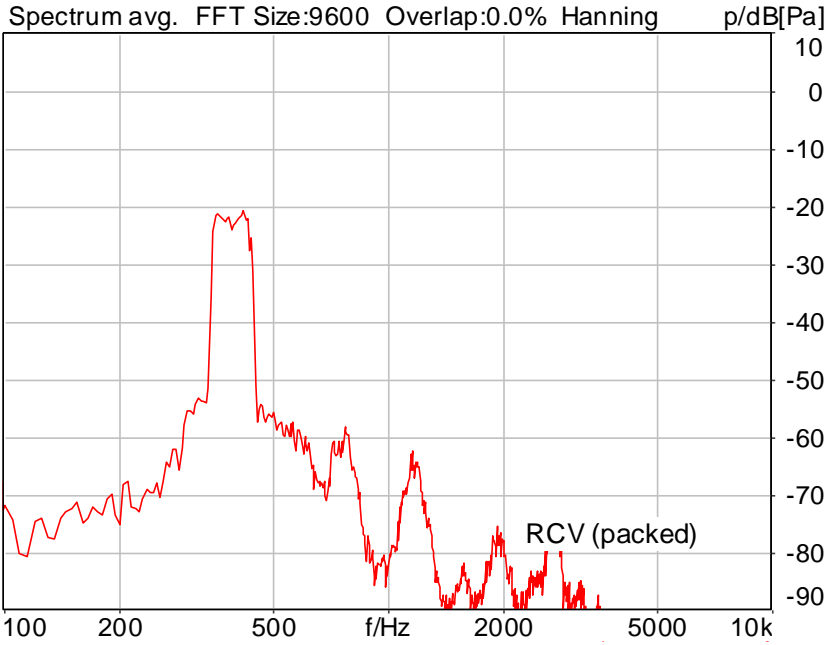
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 400 Hz NB

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



Distortion (Noise) RCV (packed): 33.29 dB (2.16%) Ok

Ok

2023/11/24 上午 12:21 ACQUA 5.1.200

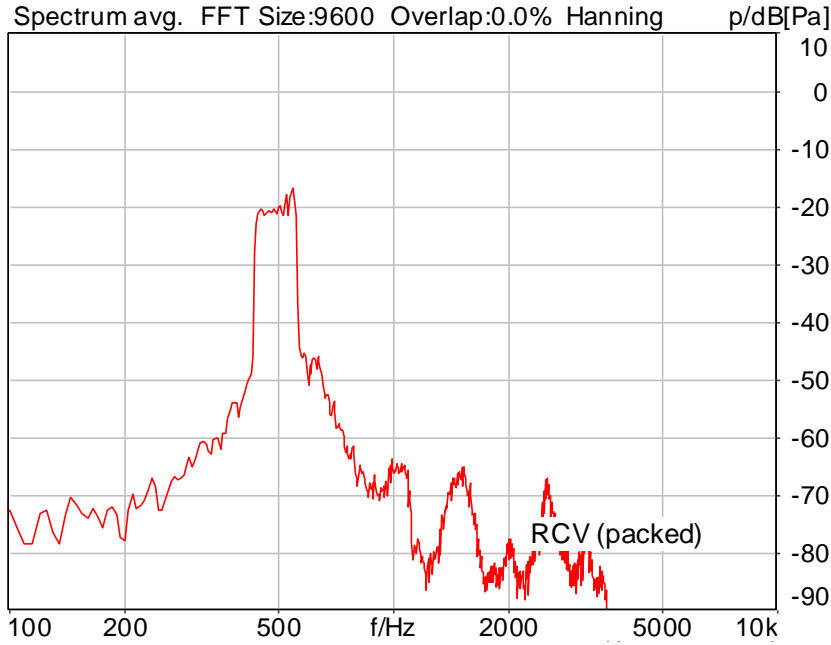
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz 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

2023/11/24 上午 12:21 ACQUA 5.1.200

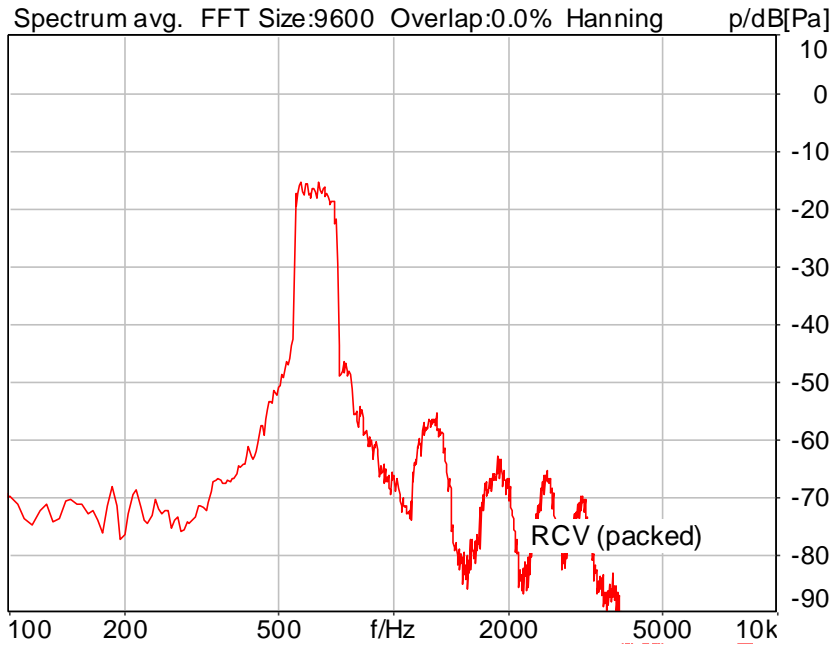
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Ok

2023/11/24 上午 12:22 ACQUA 5.1.200

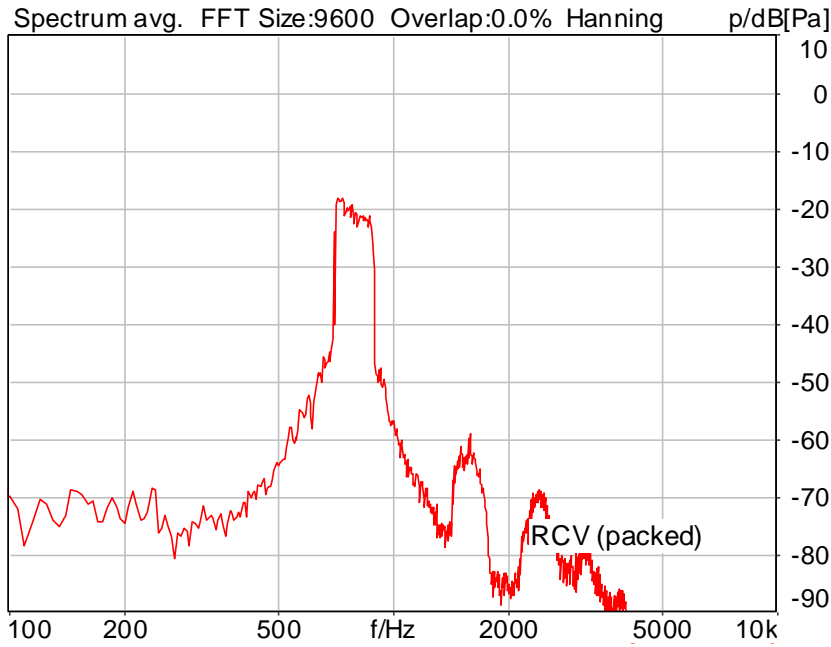
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Ok

2023/11/24 上午 12:22 ACQUA 5.1.200

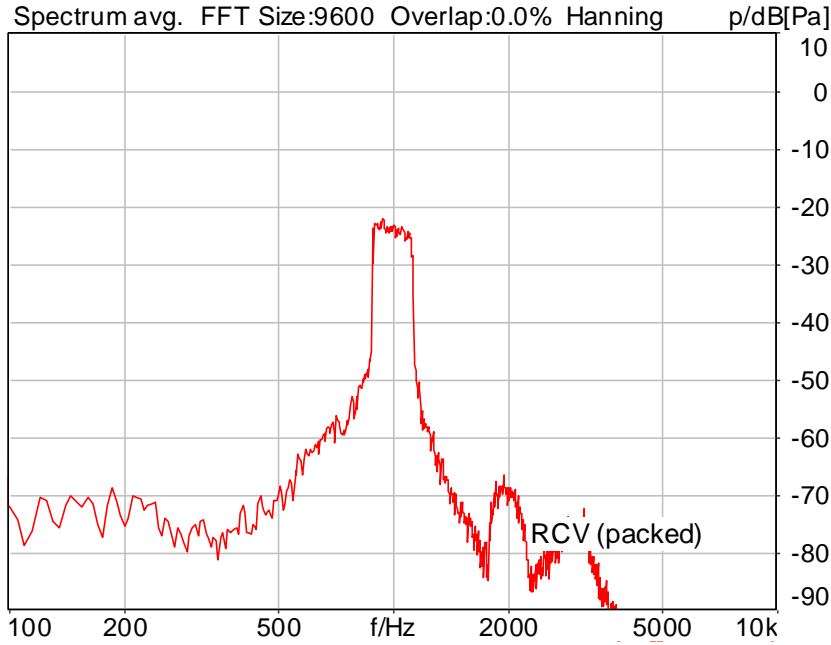
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Distortion (Noise) RCV (packed): 29.50 dB (3.35%) Ok

Ok

2023/11/24 上午 12:22 ACQUA 5.1.200

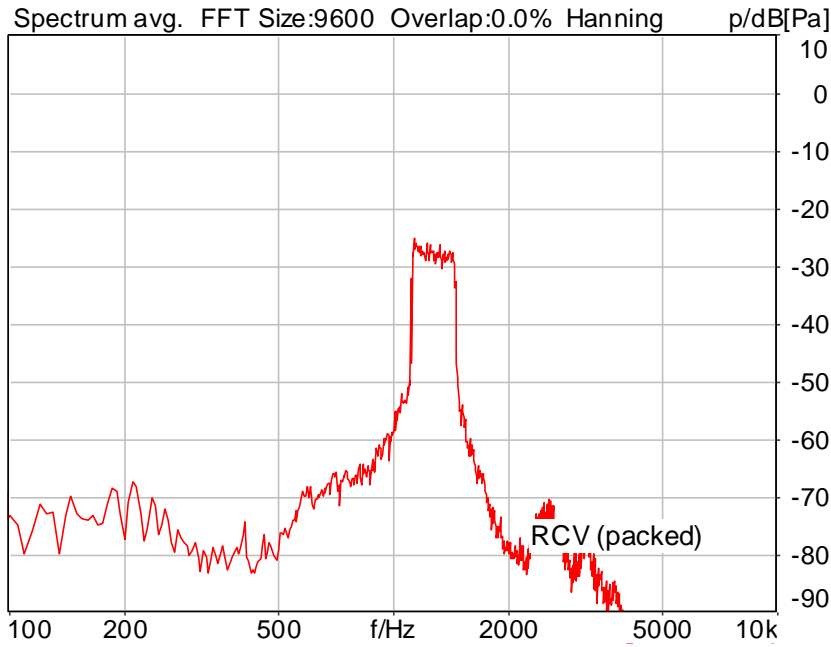
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 26.67 dB (4.64%) Ok

Ok

2023/11/24 上午 12:23 ACQUA 5.1.200

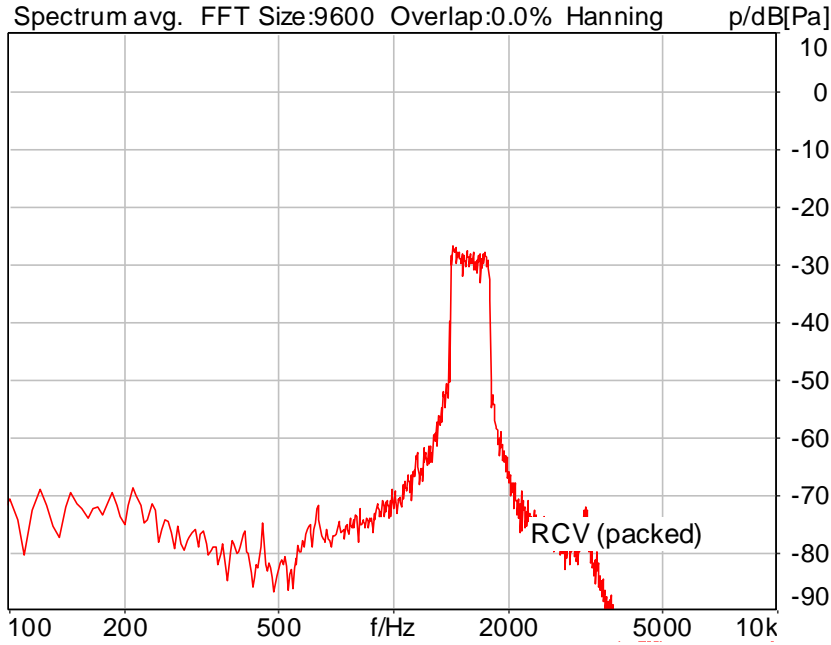
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 28.27 dB (3.86%) Ok

Ok

2023/11/24 上午 12:23 ACQUA 5.1.200

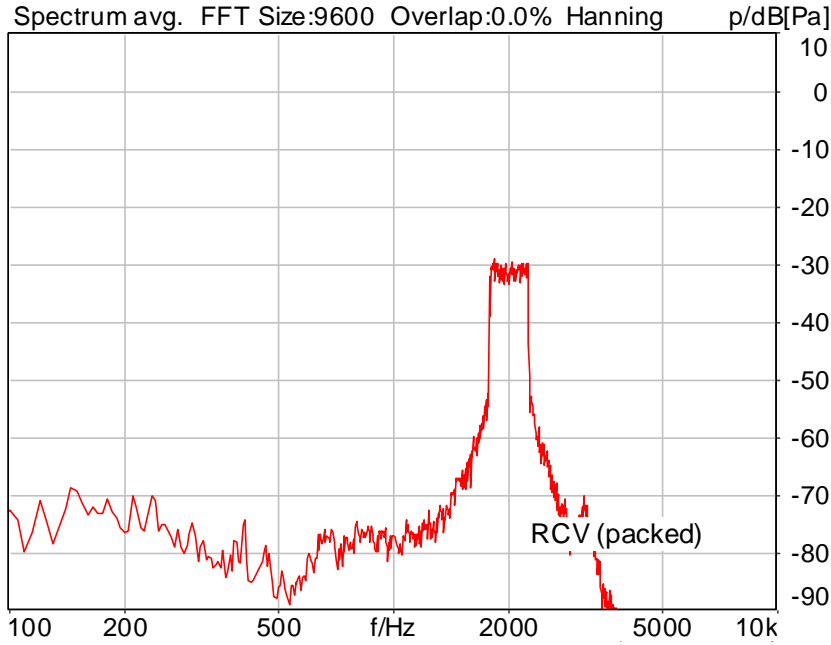
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 26.63 dB (4.66%) Ok

Ok

2023/11/24 上午 12:24 ACQUA 5.1.200

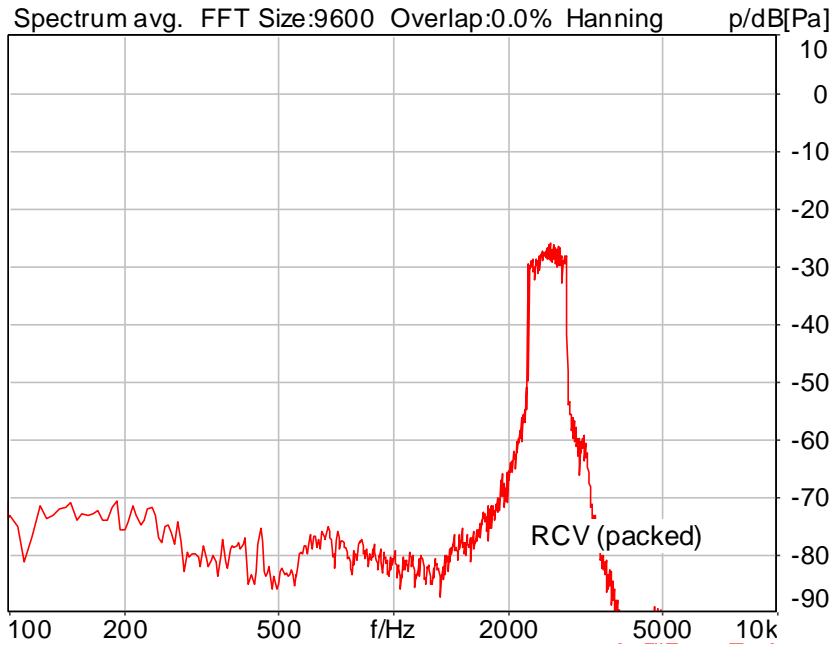
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



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

Ok

2023/11/24 上午 12:24 ACQUA 5.1.200

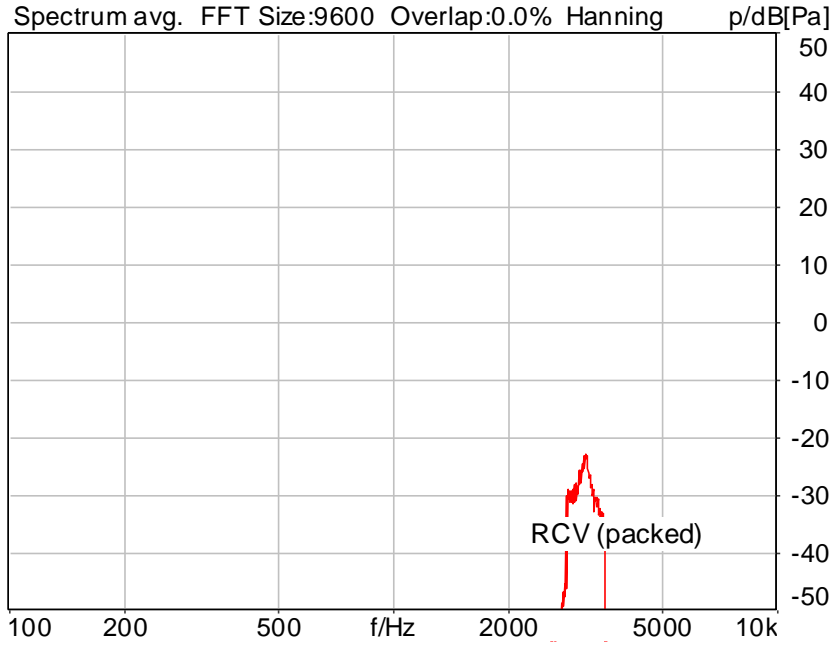
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 25.98 dB (5.03%) Ok

Ok

2023/11/24 上午 12:25 ACQUA 5.1.200

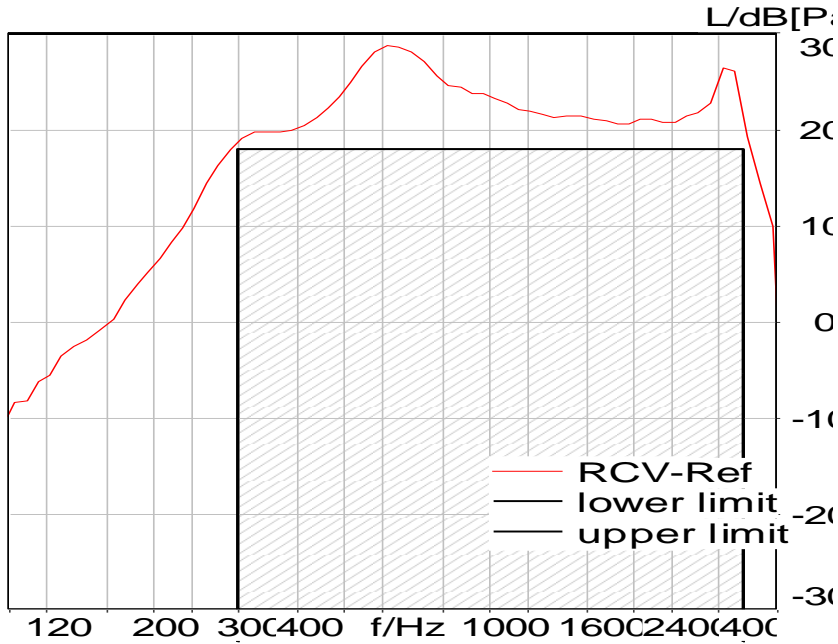
Limits

	lower
Run 1	20.00 dB



5.3 Frequency Response 8N FF HANB

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



Absolute minimal distance
1.19 dB at 611.7 Hz Ok

Ok

2023/11/24 上午 12:43 ACQUA 5.1.200

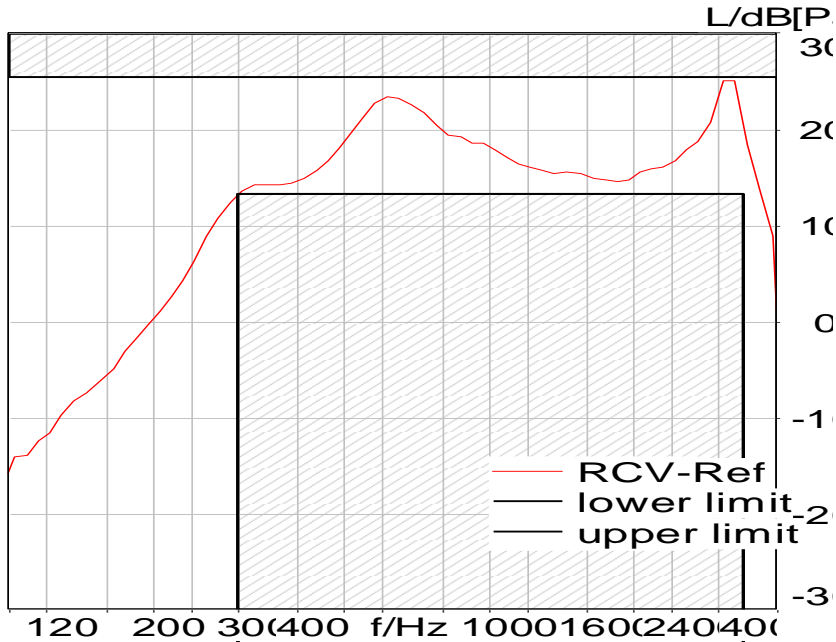
Limits

	lower
Run 1	Fit into tolerance



5.3 Frequency Response 2N FF HANB

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



Absolute minimal distance
0.27 dB at 3058.6 Hz Ok

Ok

2023/11/24 上午 12:46 ACQUA 5.1.200

Limits

	lower
Run 1	Fit into tolerance

#4 WLAN5GHz AMR NB 12.2kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	230.9
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	95.29
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	91.54
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.24
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.10
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.20
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.94
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.86



Volume Control Evaluation Report

Report No. :HA380308C

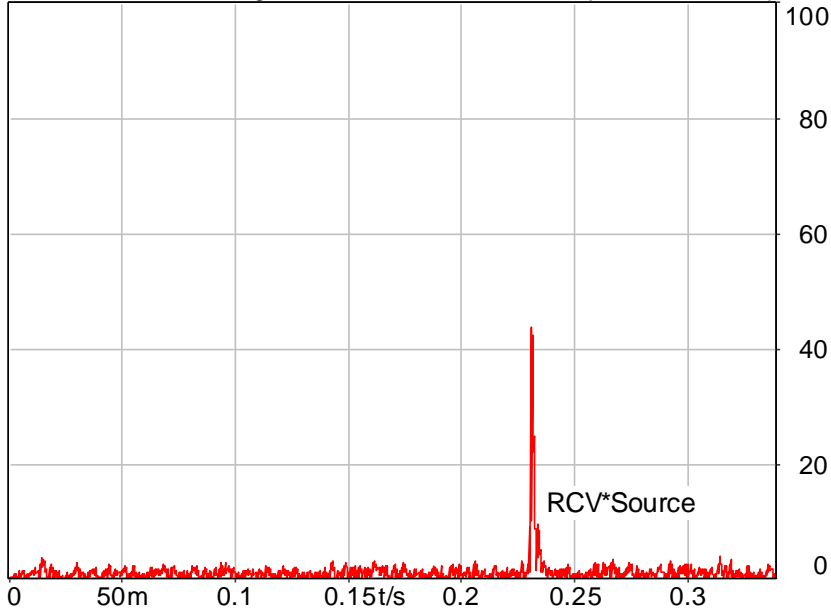
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.89
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.60
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.71
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.14
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.93
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.45
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.36
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.73
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.89
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.76
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.96
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.44
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.99
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.47
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.45
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 649.1 Hz	1.31
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3058.6 Hz	0.01



Overall Receive Delay NB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



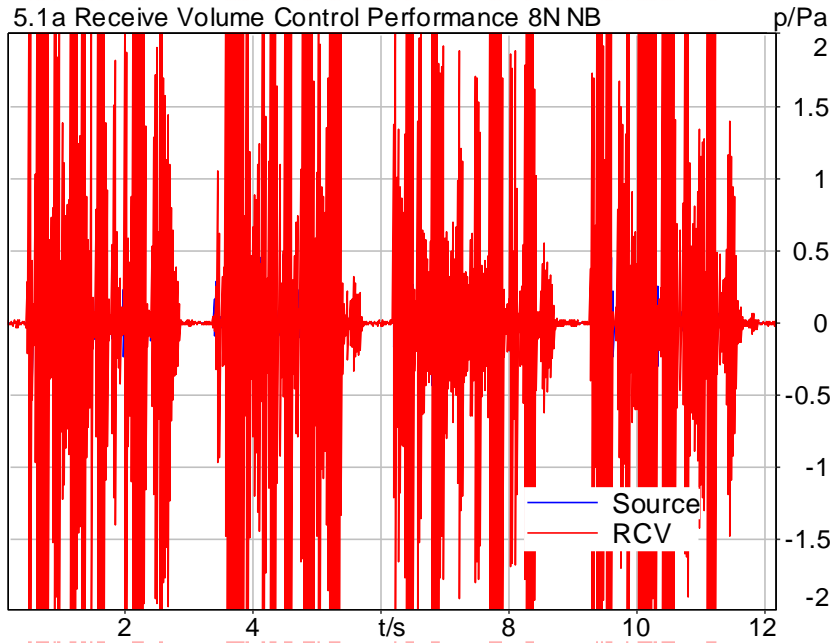
Delay (Cross): 230.9 ms

2024/1/4 下午 11:33 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N NB

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



Speech Level RCV: 95.29 dB[SPL], Act.: 61.66% Ok

Ok

2024/1/4 下午 10:03 ACQUA 5.1.200

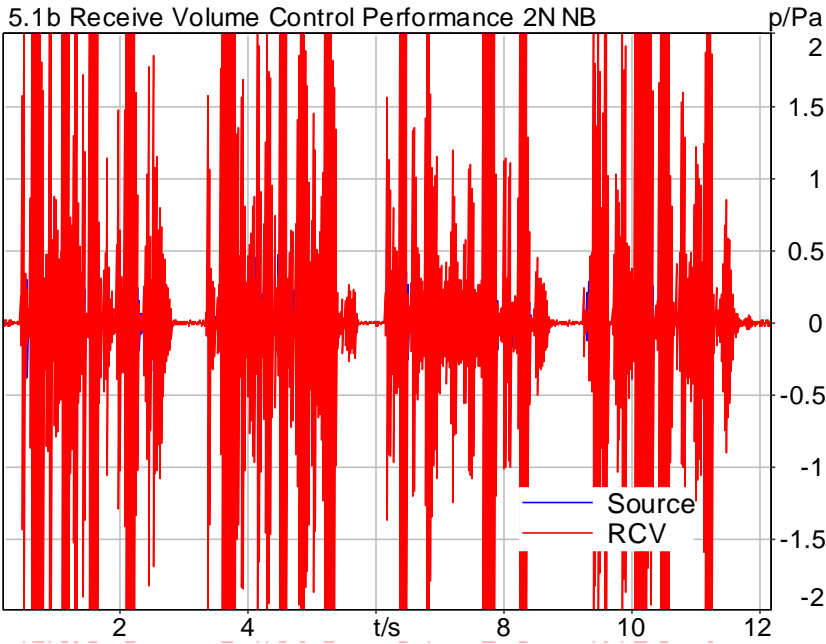
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Speech Level RCV: 91.54 dB[SPL], Act.: 56.08% Ok

Ok

2024/1/4 下午 11:43 ACQUA 5.1.200

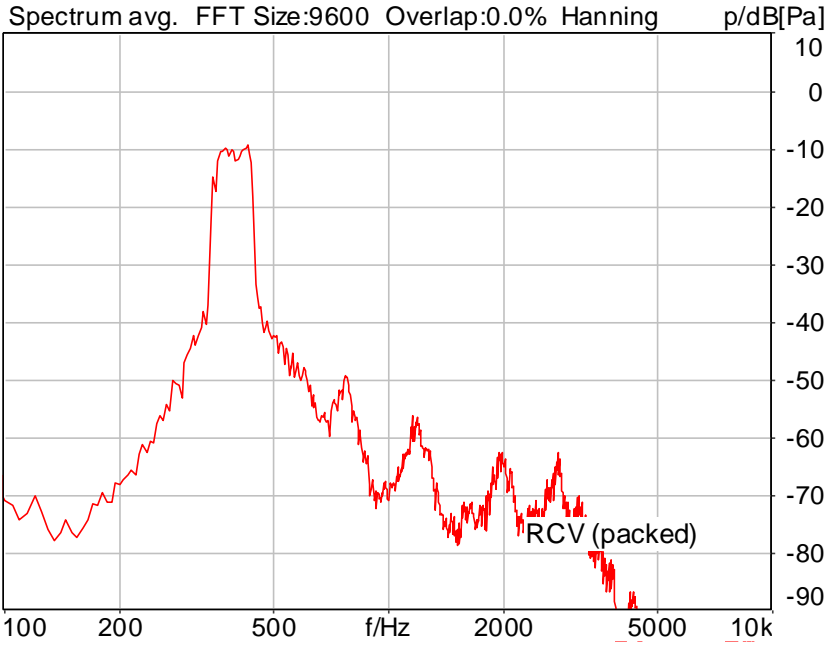
Limits

	lower
Run 1	76.00 dB20uPa



5.2 RCV Distortion and Noise - 400 Hz NB

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



Distortion (Noise) RCV (packed): 33.24 dB (2.18%) Ok

Ok

2024/1/4 下午 10:07 ACQUA 5.1.200

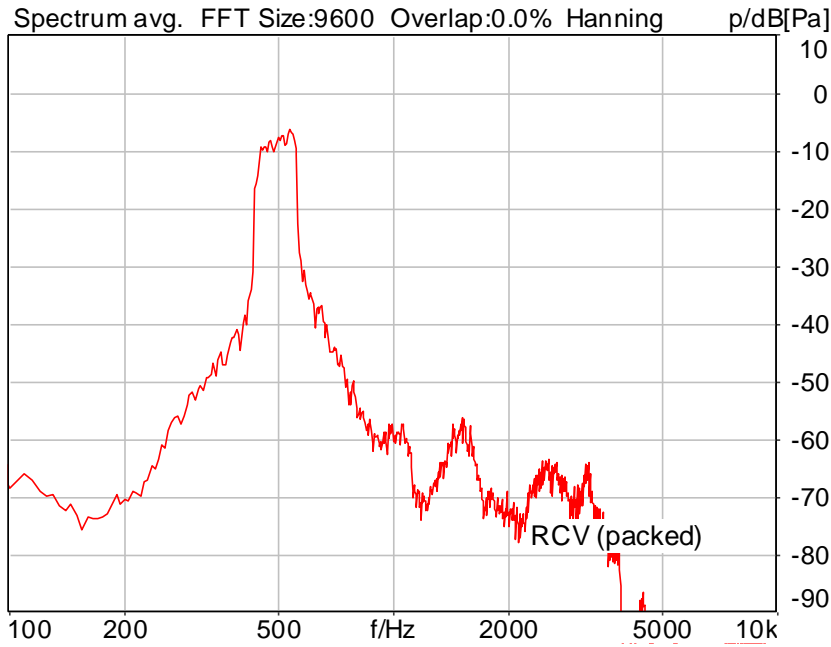
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Distortion (Noise) RCV (packed): 31.10 dB (2.79%) Ok

Ok

2024/1/4 下午 10:07 ACQUA 5.1.200

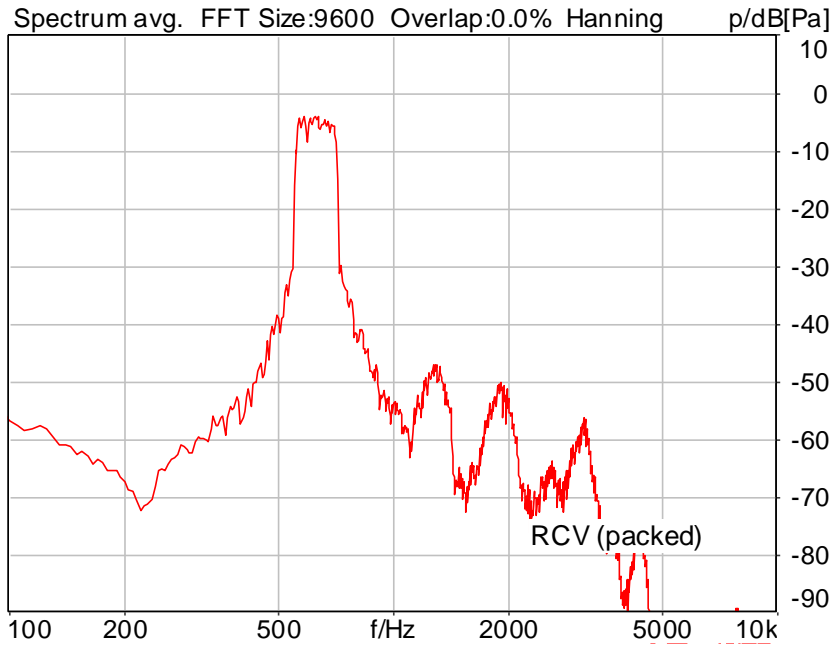
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



Distortion (Noise) RCV (packed): 33.20 dB (2.19%) Ok

Ok

2024/1/4 下午 10:08 ACQUA 5.1.200

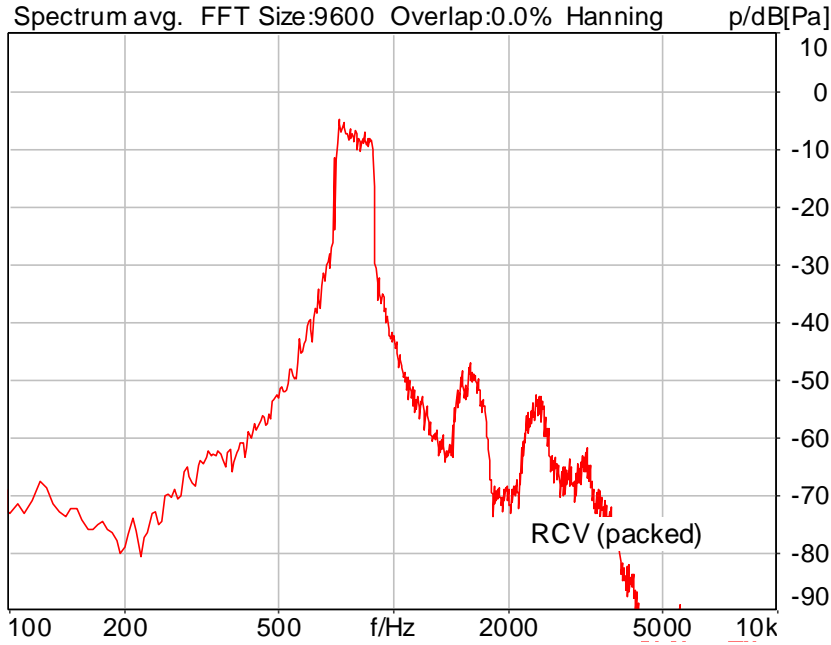
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 29.94 dB (3.18%) Ok

Ok

2024/1/4 下午 10:08 ACQUA 5.1.200

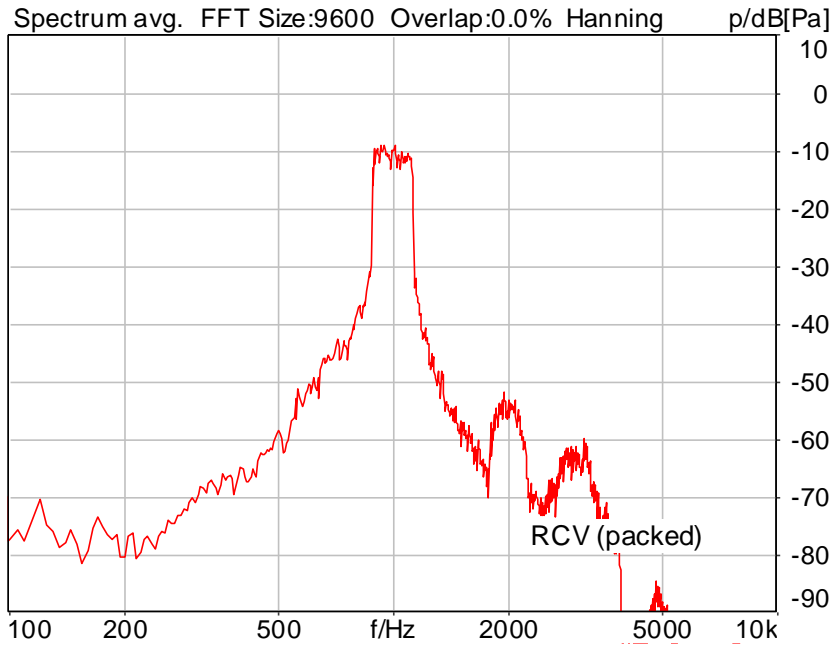
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



Distortion (Noise) RCV (packed): 28.86 dB (3.61%) Ok

Ok

2024/1/4 下午 10:09 ACQUA 5.1.200

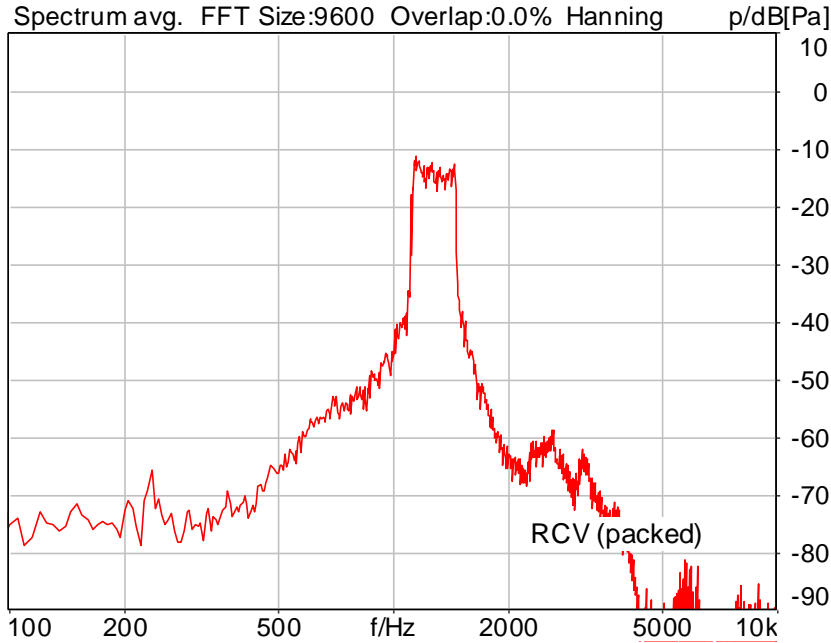
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



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

Ok

2024/1/4 下午 10:09 ACQUA 5.1.200

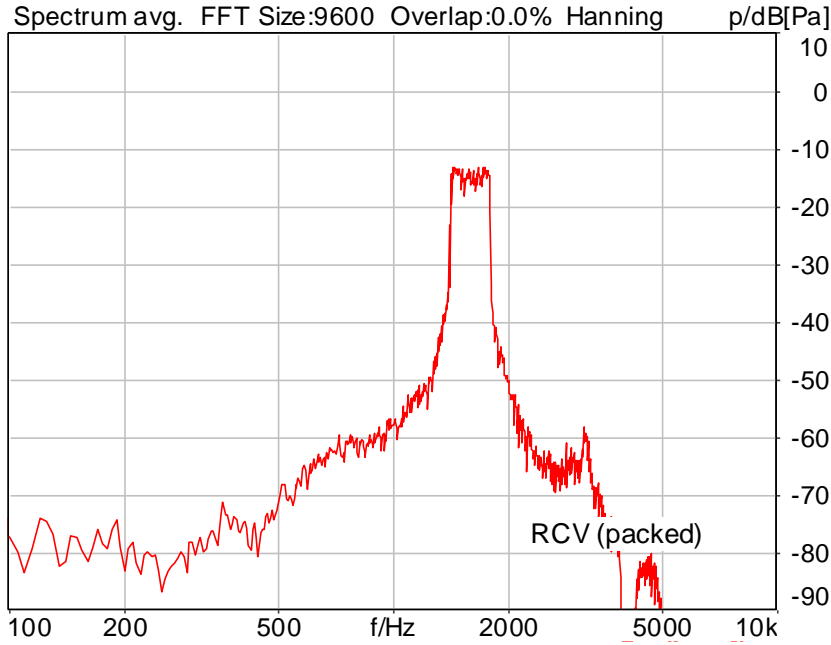
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



Distortion (Noise) RCV (packed): 28.60 dB (3.71%) Ok

Ok

2024/1/4 下午 10:10 ACQUA 5.1.200

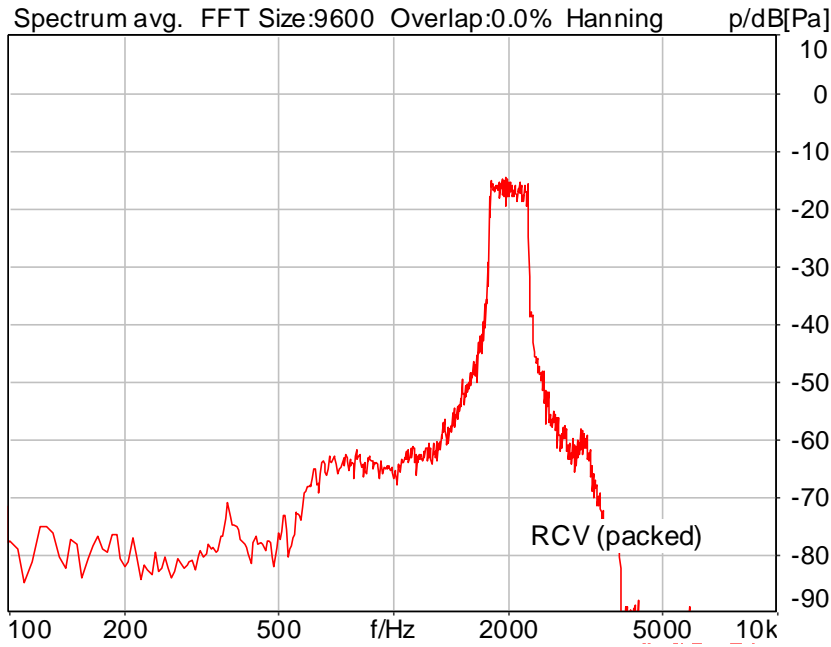
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 26.71 dB (4.62%) Ok

Ok

2024/1/4 下午 10:10 ACQUA 5.1.200

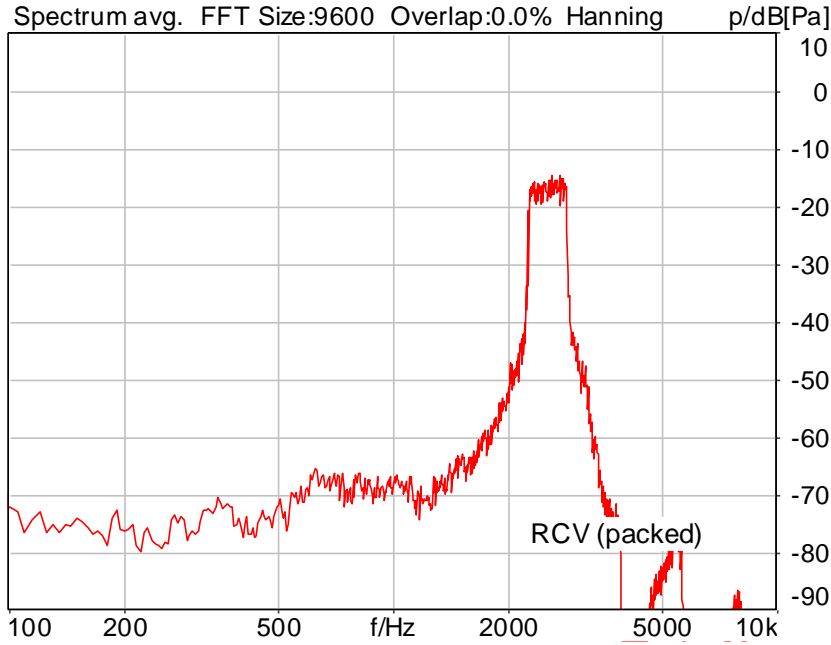
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 27.14 dB (4.39%) Ok

Ok

2024/1/4 下午 10:11 ACQUA 5.1.200

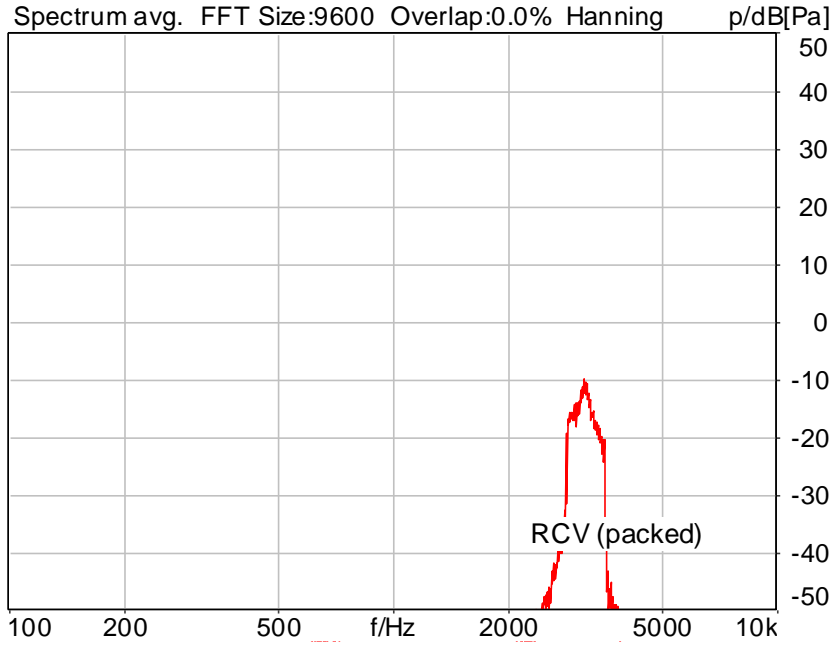
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 26.93 dB (4.50%) Ok

Ok

2024/1/4 下午 10:11 ACQUA 5.1.200

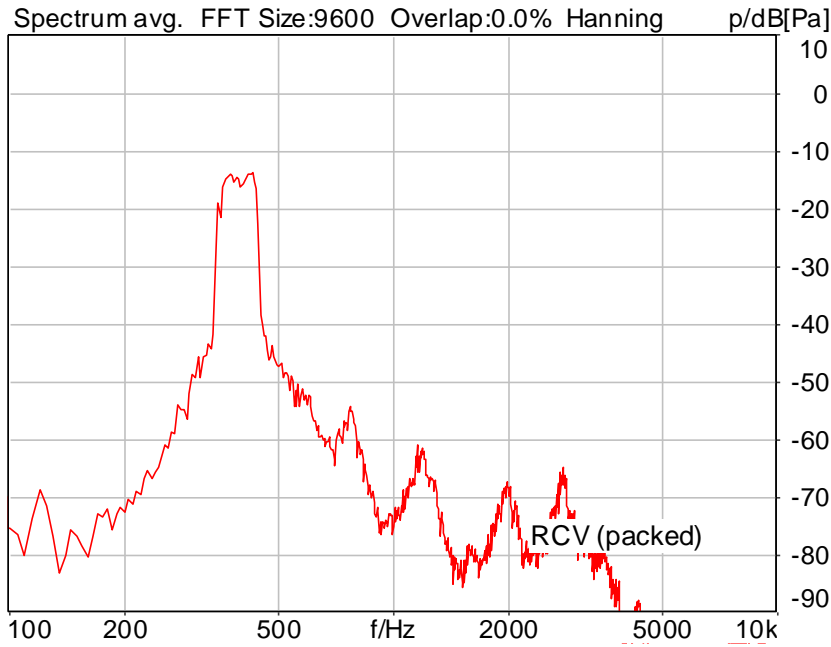
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 400 Hz NB

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



Ok

2024/1/4 下午 11:34 ACQUA 5.1.200

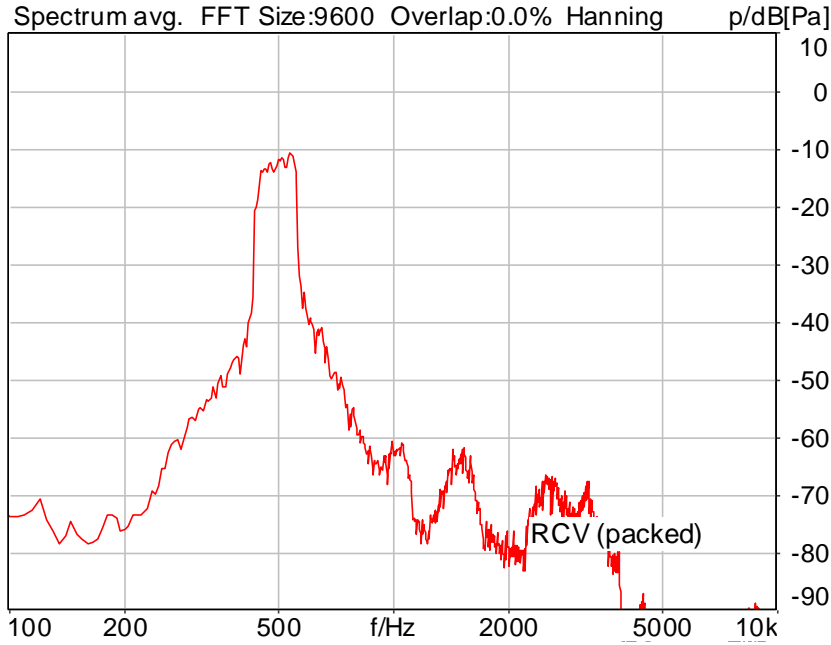
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 500 Hz NB

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



Distortion (Noise) RCV (packed): 31.36 dB (2.70%) Ok

Ok

2024/1/4 下午 11:35 ACQUA 5.1.200

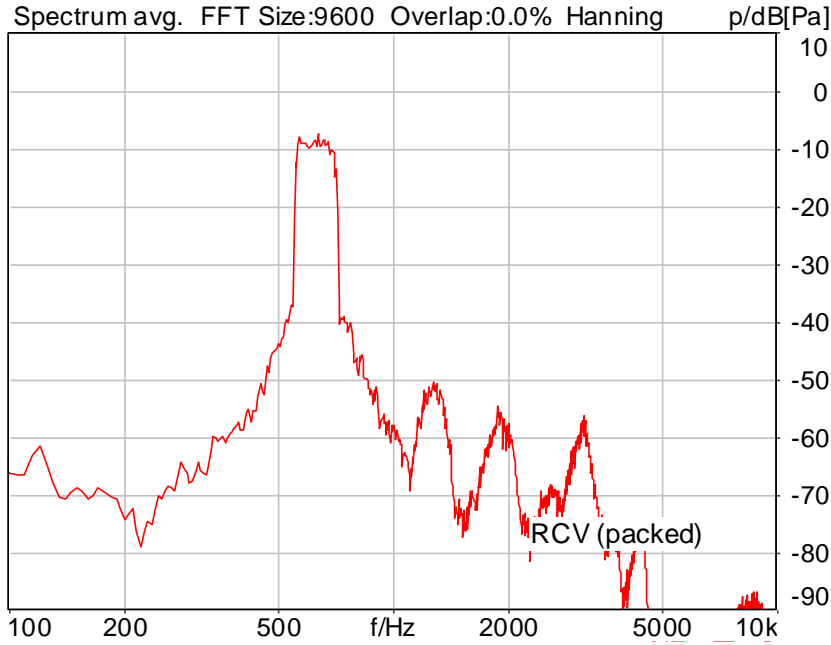
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 630 Hz NB

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



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

Ok

2024/1/4 下午 11:35 ACQUA 5.1.200

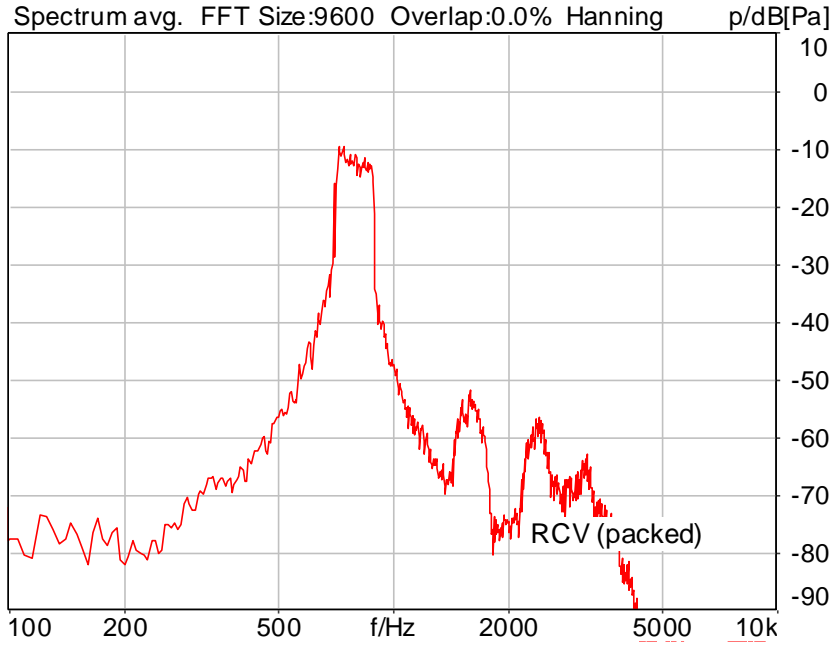
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 800 Hz NB

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



Distortion (Noise) RCV (packed): 29.89 dB (3.20%) Ok

Ok

2024/1/4 下午 11:36 ACQUA 5.1.200

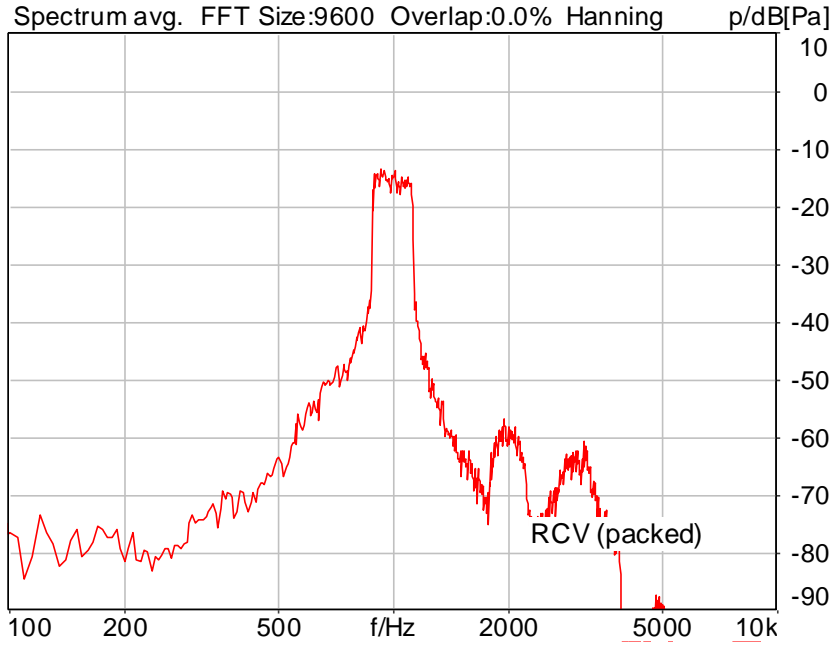
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1000 Hz NB

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



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

Ok

2024/1/4 下午 11:36 ACQUA 5.1.200

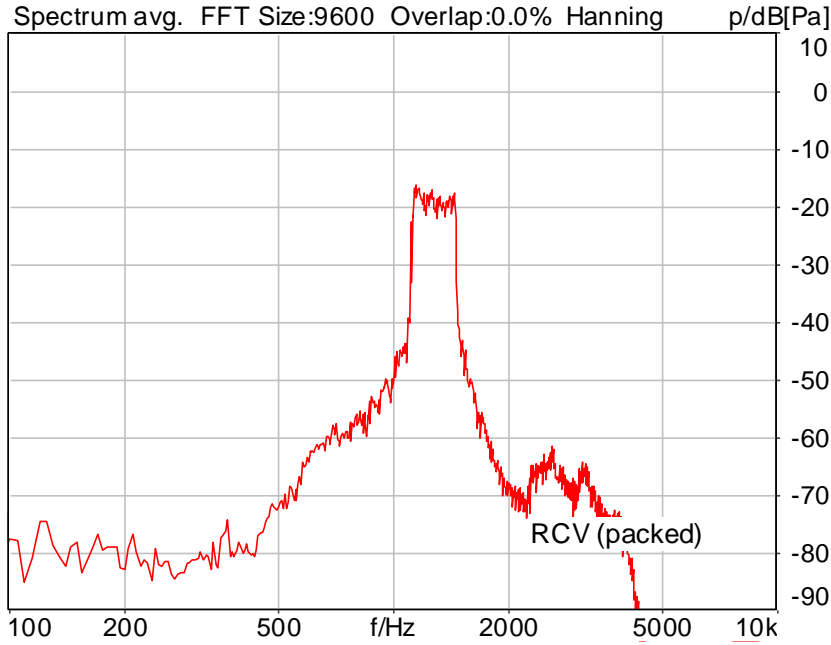
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1250 Hz NB

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



Distortion (Noise) RCV (packed): 24.96 dB (5.65%) Ok

Ok

2024/1/4 下午 11:37 ACQUA 5.1.200

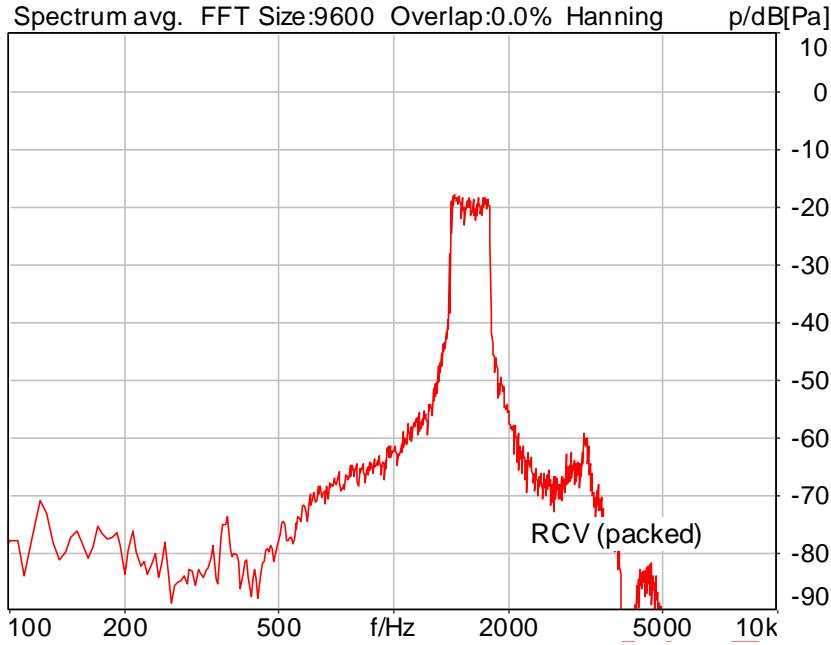
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 1600 Hz NB

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



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

Ok

2024/1/4 下午 11:37 ACQUA 5.1.200

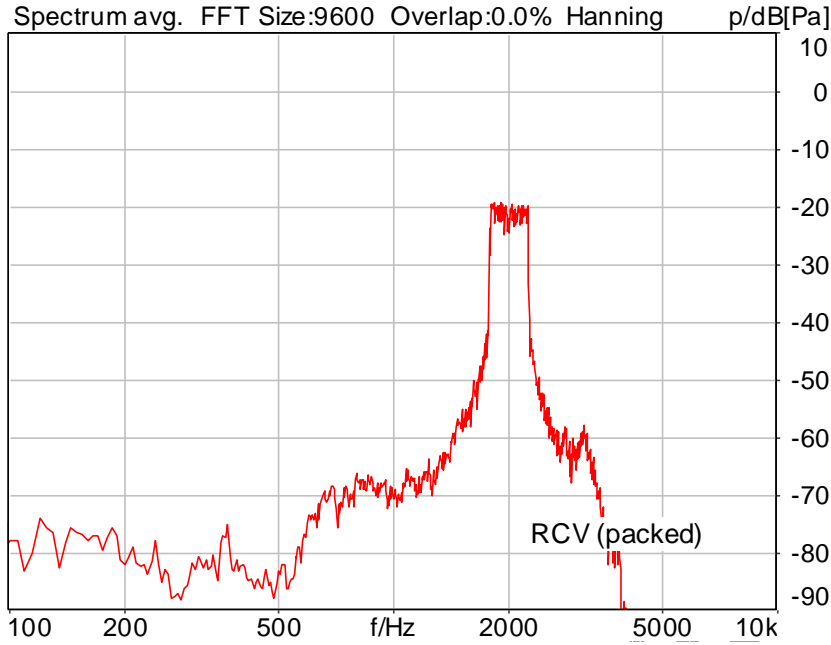
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2000 Hz NB

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



Distortion (Noise) RCV (packed): 26.99 dB (4.47%) Ok

Ok

2024/1/4 下午 11:38 ACQUA 5.1.200

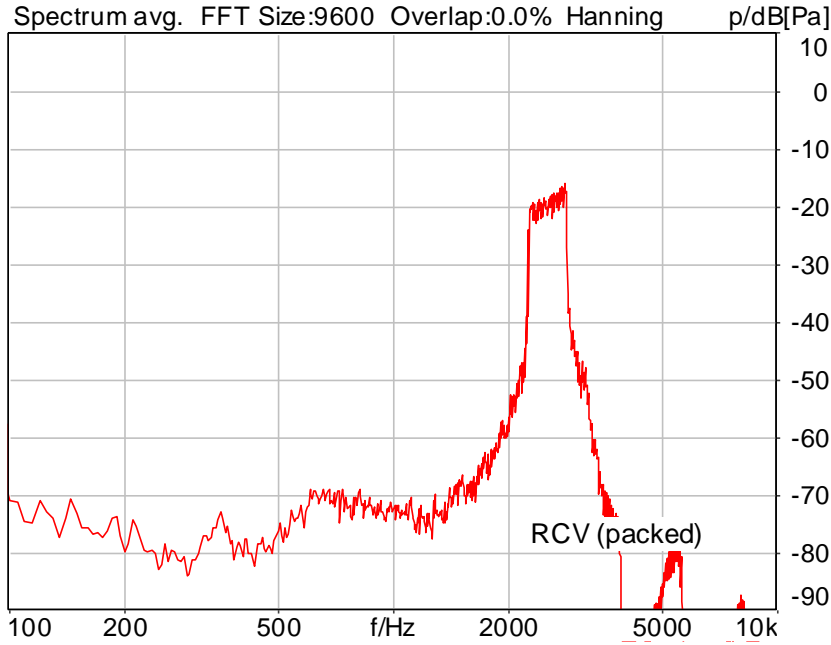
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 2500 Hz NB

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



Distortion (Noise) RCV (packed): 26.47 dB (4.75%) Ok

Ok

2024/1/4 下午 11:38 ACQUA 5.1.200

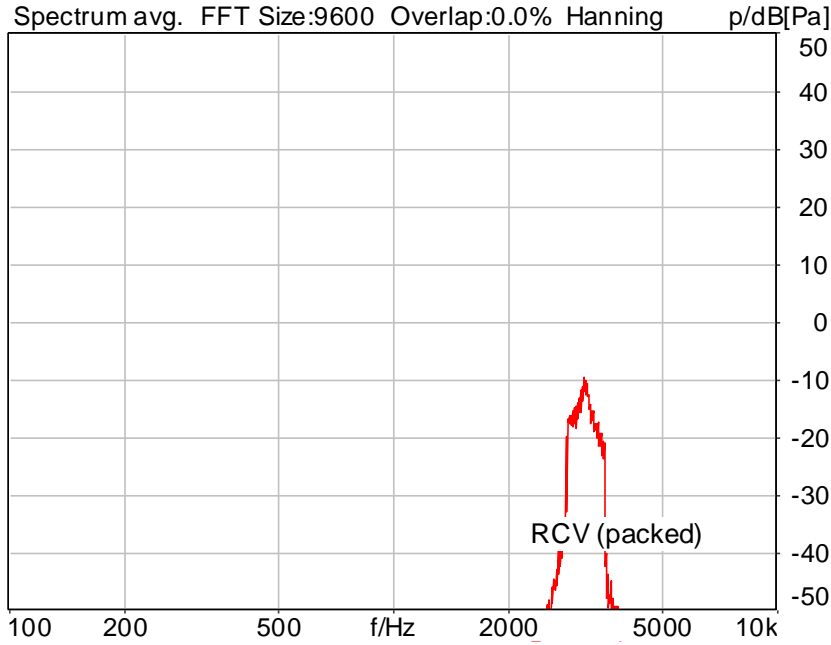
Limits

	lower
Run 1	20.00 dB



5.2 RCV Distortion and Noise - 3150 Hz NB

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



Distortion (Noise) RCV (packed): 28.45 dB (3.78%) Ok

Ok

2024/1/4 下午 11:39 ACQUA 5.1.200

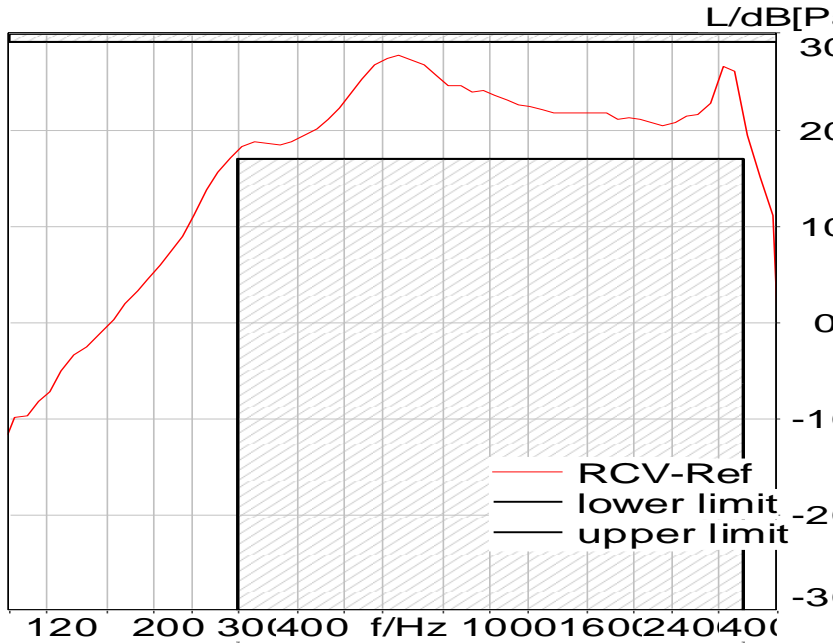
Limits

	lower
Run 1	20.00 dB



5.3 Frequency Response 8N FF HANB

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



Absolute minimal distance
1.31 dB at 649.1 Hz Ok

Ok

2024/1/4 下午 10:11 ACQUA 5.1.200

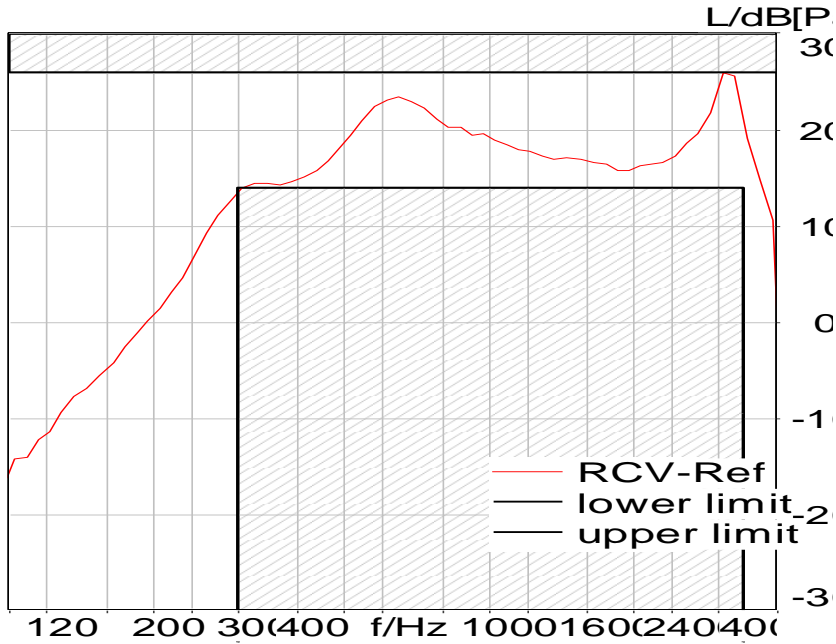
Limits

	lower
Run 1	Fit into tolerance



5.3 Frequency Response 2N FF HANB

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



Absolute minimal distance
0.01 dB at 3058.6 Hz Ok

Ok

2024/1/4 下午 11:42 ACQUA 5.1.200

Limits

	lower
Run 1	Fit into tolerance

Appendix A. Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.b>



#5 GSM850 AMR WB 6.60kbps

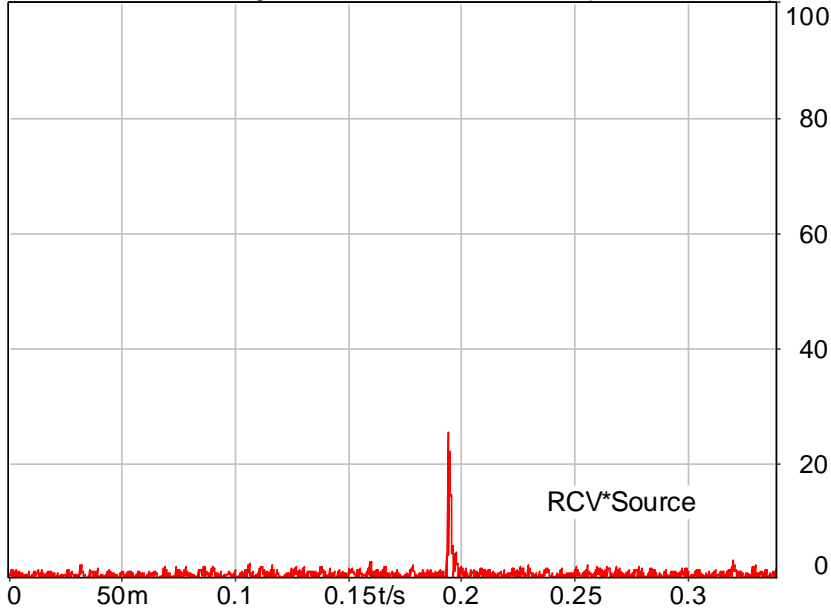
SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	194.4
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	94.32
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	90.34



Overall Receive Delay WB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



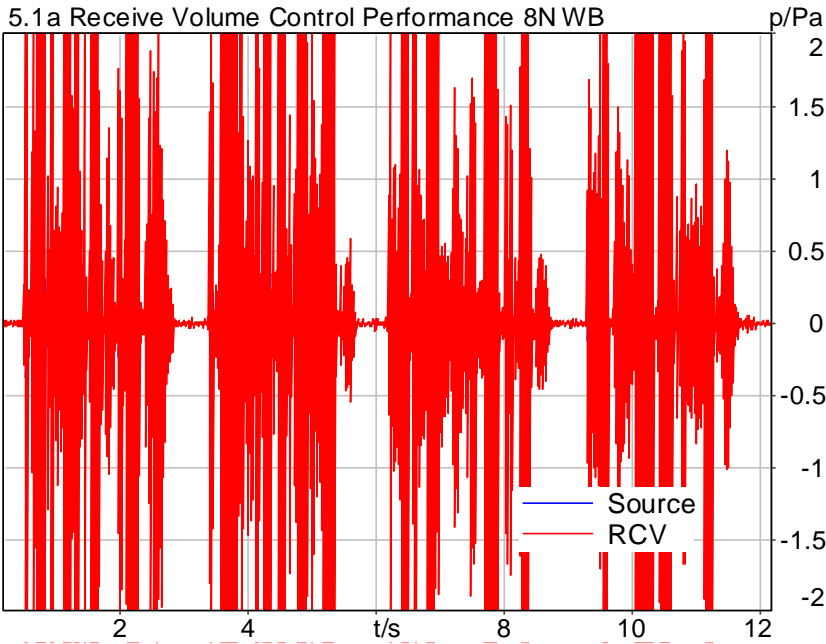
Delay (Cross): 194.4 ms

2023/11/23 下午 09:23 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N WB

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



Speech Level RCV: 94.32 dB[SPL], Act.: 59.60% Ok

Ok

2023/11/23 下午 09:23 ACQUA 5.1.200

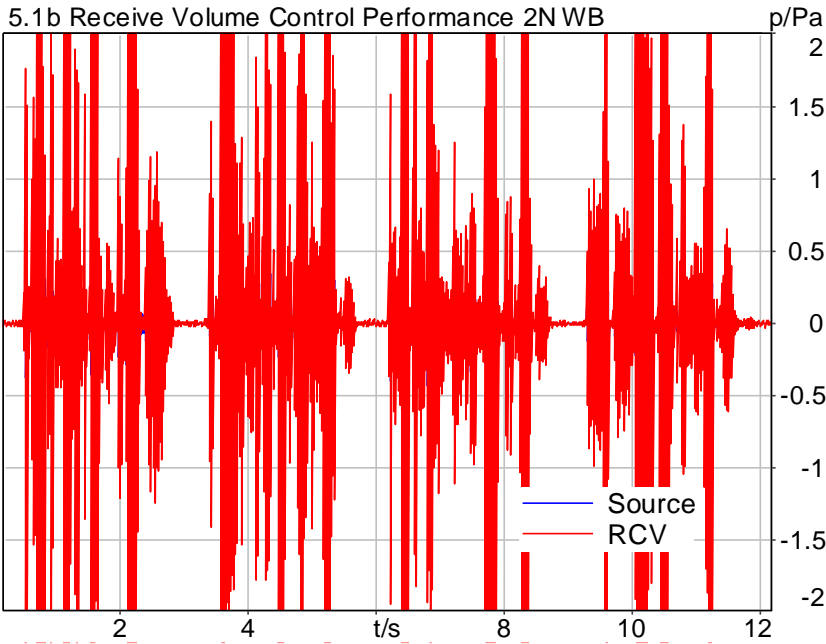
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N WB

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



Speech Level RCV: 90.34 dB[SPL], Act.: 47.77% Ok

Ok

2023/11/23 下午 09:24 ACQUA 5.1.200

Limits

	lower
Run 1	76.00 dB20uPa

#6 WCDMA V AMR WB 23.85kbps

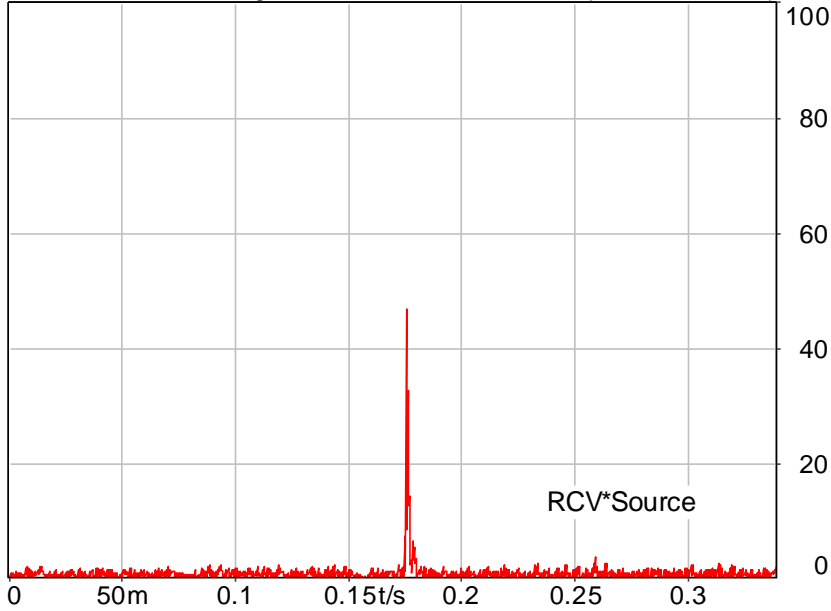
SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	176.0
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	94.76
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	88.14



Overall Receive Delay WB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



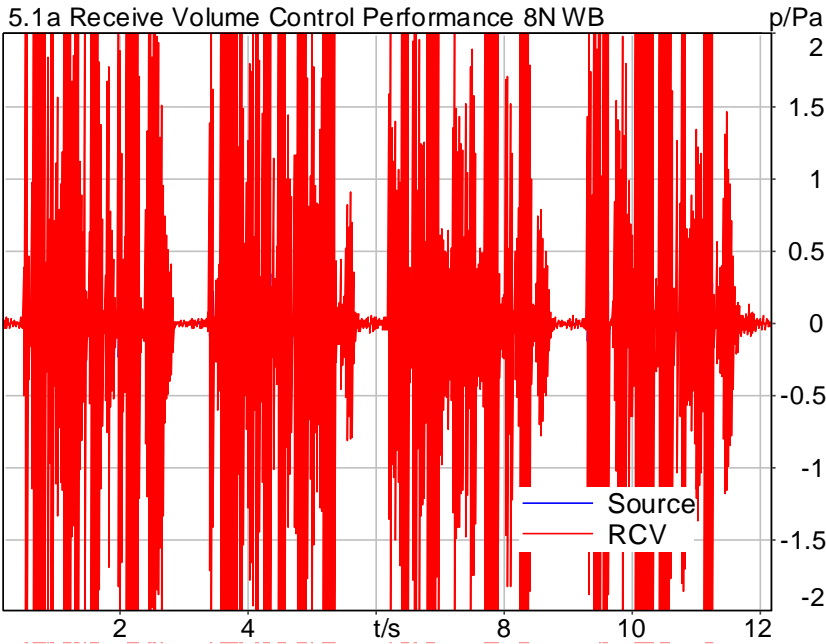
Delay (Cross): 176.0 ms

2023/11/24 下午 03:14 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N WB

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



Speech Level RCV: 94.76 dB[SPL], Act.: 63.66% Ok

Ok

2023/11/24 下午 03:14 ACQUA 5.1.200

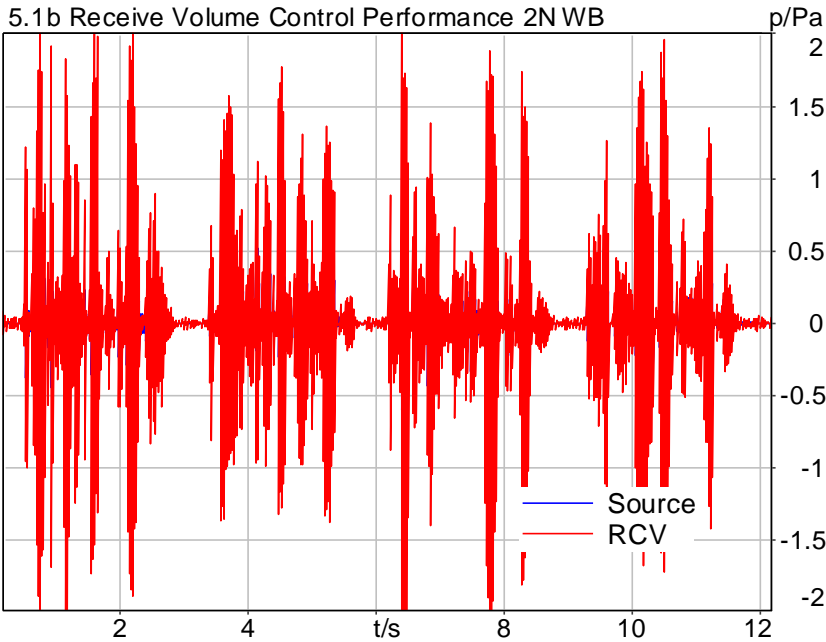
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N WB

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



Speech Level RCV: 88.14 dB[SPL], Act.: 20.83% Ok

Ok

2023/11/24 下午 03:15 ACQUA 5.1.200

Limits

	lower
Run 1	76.00 dB20uPa

#7 LTE B25 AMR NB 4.75kbps

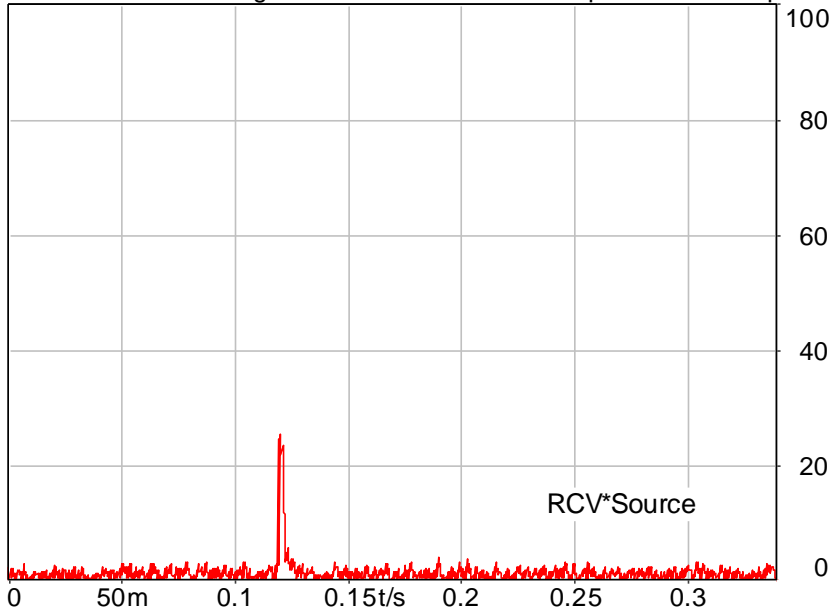
SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	120.5
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	95.80
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	88.43



Overall Receive Delay NB

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

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



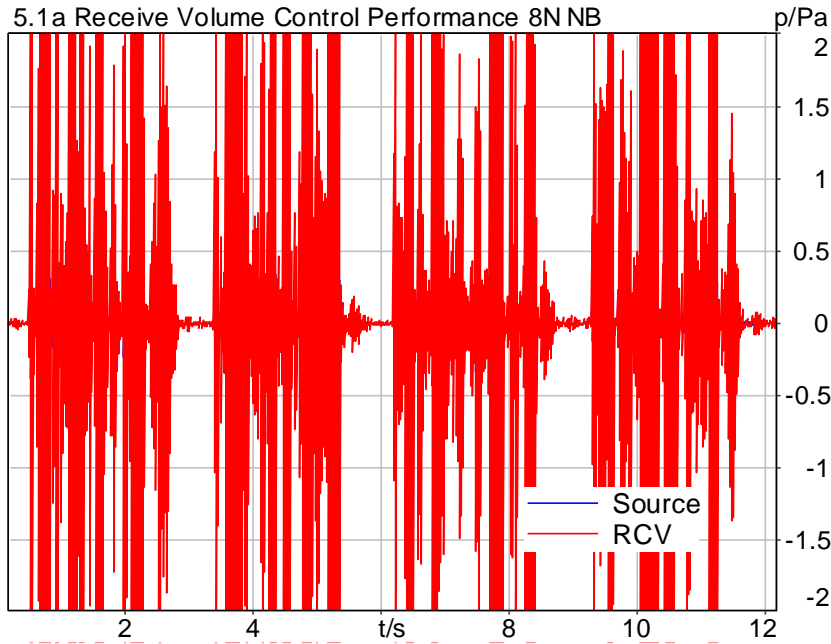
Delay (Cross): 120.5 ms

2023/11/24 下午 05:23 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N NB

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



Speech Level RCV: 95.80 dB[SPL], Act.: 58.73% Ok

Ok

2023/11/24 下午 05:23 ACQUA 5.1.200

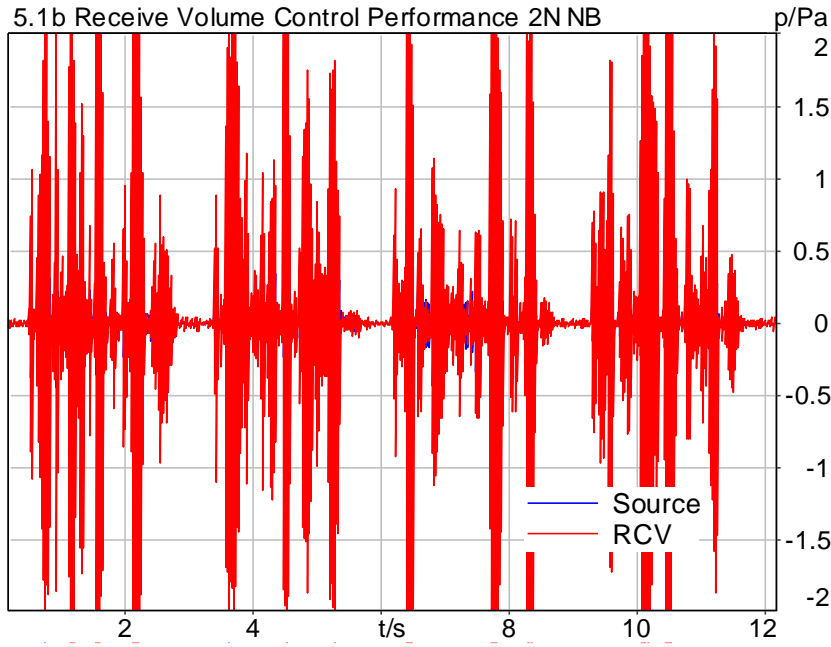
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N NB

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



Speech Level RCV: 88.43 dB[SPL], Act.: 43.09% Ok

Ok

2023/11/24 下午 05:24 ACQUA 5.1.200

Limits

	lower
Run 1	76.00 dB20uPa



#8 WLAN2.4GHz AMR WB 6.60kbps

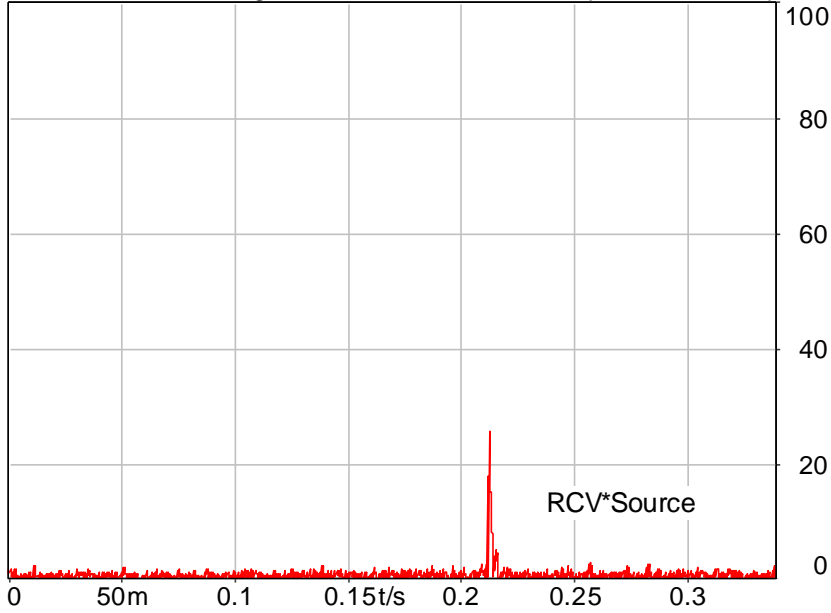
SMD	Status	Single Value Description	Single Value
Overall Receive Delay WB	Done	Delay (Cross) [ms]	212.6
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	94.22
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	88.25



Overall Receive Delay WB

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

Cross correlation avg. FFT Size:131072 Overlap:0.0% Envelop %



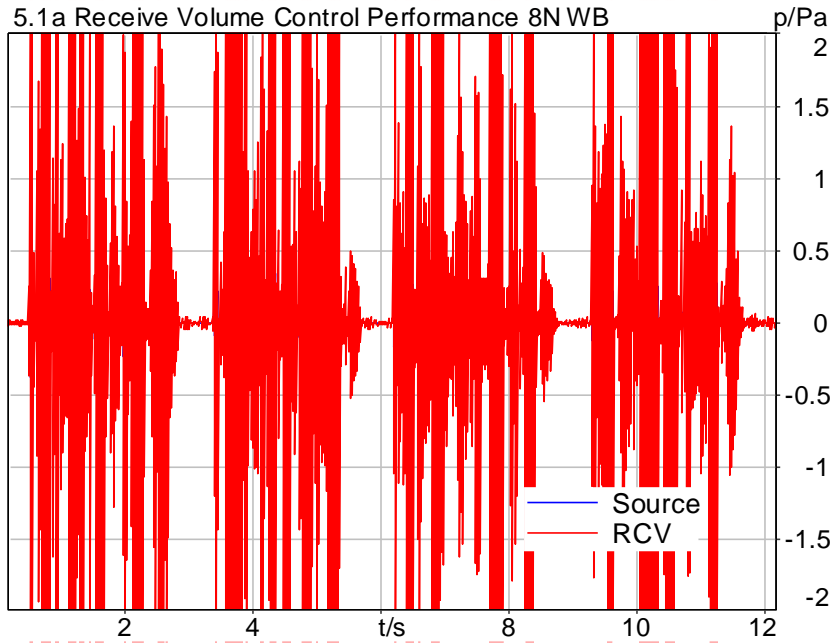
Delay (Cross): 212.6 ms

2023/12/4 下午 03:20 ACQUA 5.1.200



5.1a Receive Volume Control Performance 8N WB

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



Speech Level RCV: 94.22 dB[SPL], Act.: 60.83% Ok

Ok

2023/12/4 下午 03:21 ACQUA 5.1.200

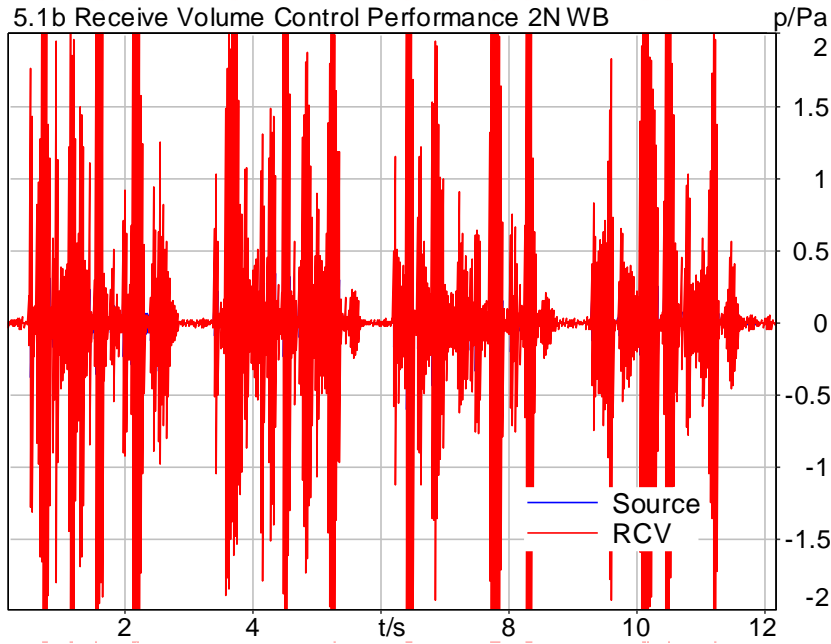
Limits

	lower
Run 1	88.00 dB20uPa



5.1b Receive Volume Control Performance 2N WB

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



Speech Level RCV: 88.25 dB[SPL], Act.: 43.27% Ok

Ok

2023/12/4 下午 03:21 ACQUA 5.1.200

Limits

	lower
Run 1	76.00 dB20uPa