SPORTON LAB. Volume Control Evaluation Report

Appendix A. Volume Control Evaluation Results

<Evaluation results for KDB 285076 D05 2.a>

#1 WiFi 6GHz EVS NB 24.4Kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	200.1
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	87.53
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	82.39
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.61
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.81
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.52
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.19
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.56
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.93
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.36
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.18
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.23
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.90
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.44
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.69
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.92
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.84
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.19
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.06
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.00
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.05
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.92
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	45.21
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	0.16
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	0.45

Report No.:HA4O3002B

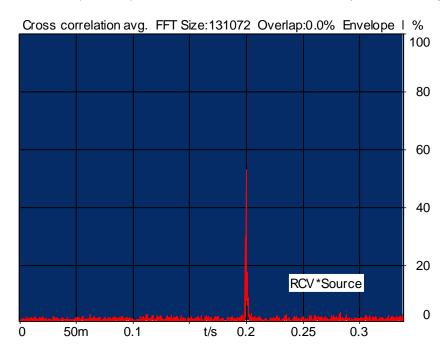
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Overall Receive Delay NB

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

Report No.:HA4O3002B



Channel	Delay	Correlation
RCV*Source	200.1 ms	53.02 %

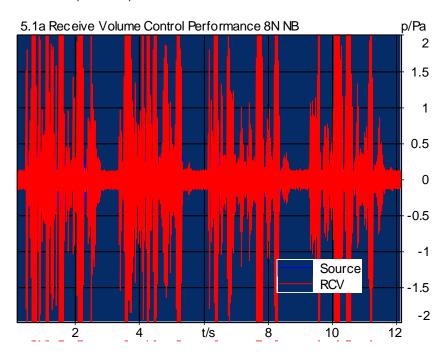
2024-12-30 上午 11:33 ACQUA 6.1.100

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5.1a Receive Volume Control Performance 8N NB

Report No.: HA4O3002B

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



Channel	Speech level	Activity	
RCV	87.53 dB[SPL]	80.35%	Ok

Ok

2024-12-30 上午 11:46 ACQUA 6.1.100

Limits

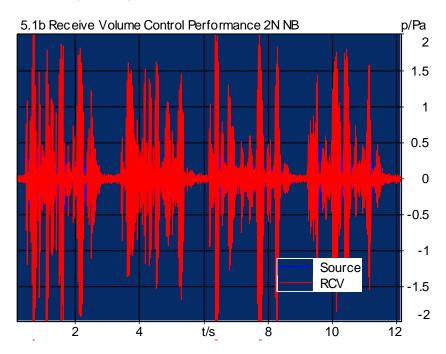
lower	
76.00 dB[SPL]	

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Report No.:HA4O3002B

5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	82.39 dB[SPL]	80.98%	Ok

Ok

2024-12-30 上午 11:36 ACQUA 6.1.100

Limits

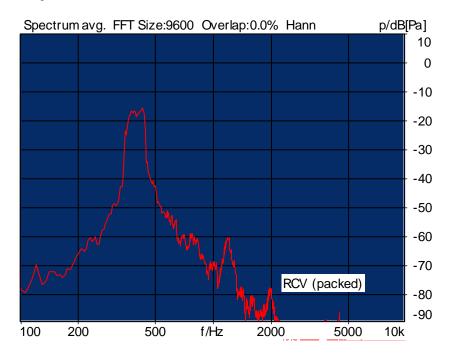
lower
76.00 dB[SPL]

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 30.61 dB (2.95%) Ok

Ok

2024-12-30 上午 11:12 ACQUA 6.1.100

Limits

lower

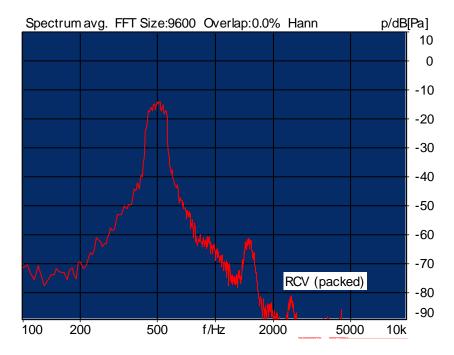
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 29.81 dB (3.23%) Ok

Ok

2024-12-30 上午 11:13 ACQUA 6.1.100

Limits

lower

20.00 dB

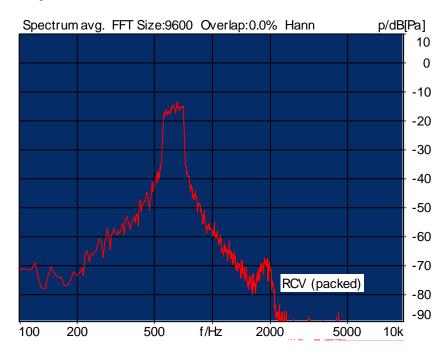
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5.2 RCV Distortion and Noise - 630 Hz NB

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

Report No.: HA4O3002B



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

Ok

2024-12-30 上午 11:13 ACQUA 6.1.100

Limits

lower

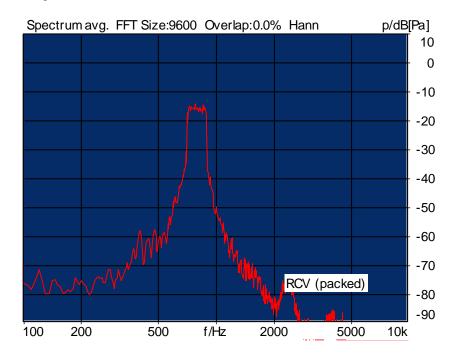
20.00 dB

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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): 30.19 dB (3.10%) Ok

Ok

2024-12-30 上午 11:14 ACQUA 6.1.100

Limits

lower

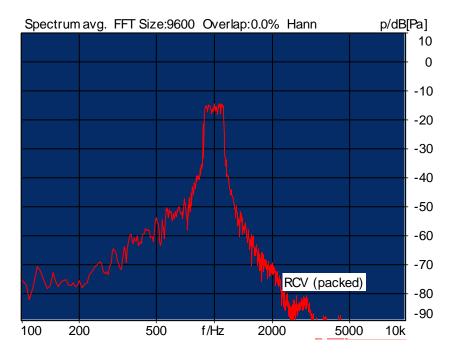
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 26.56 dB (4.70%) Ok

Ok

2024-12-30 上午 11:14 ACQUA 6.1.100

Limits

lower

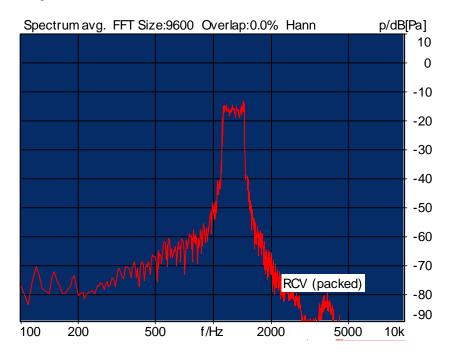
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 24.93 dB (5.67%) Ok

Ok

2024-12-30 上午 11:15 ACQUA 6.1.100

Limits

lower

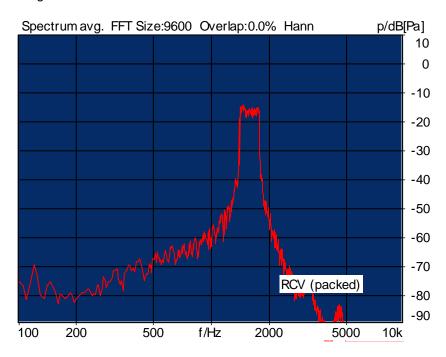
20.00 dB

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Report No. :HA4O3002B

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): 28.36 dB (3.82%) Ok

Ok

2024-12-30 上午 11:16 ACQUA 6.1.100

Limits

lower

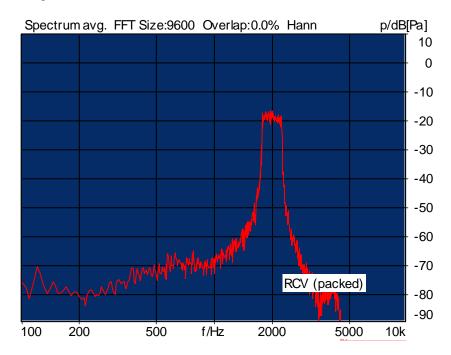
20.00 dB

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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): 27.18 dB (4.37%) Ok

Ok

2024-12-30 上午 11:16 ACQUA 6.1.100

Limits

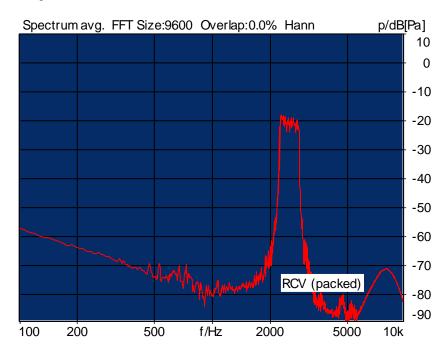
lower

20.00 dB

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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): 33.23 dB (2.18%) Ok

Ok

2024-12-30 上午 11:17 ACQUA 6.1.100

Limits

lower

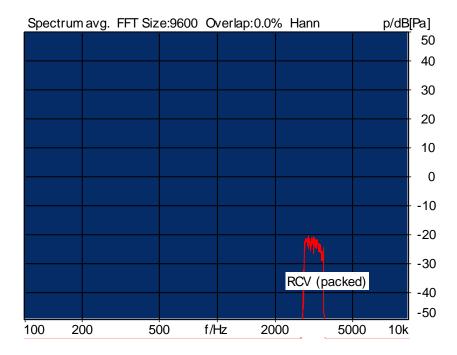
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 35.90 dB (1.60%) Ok

Ok

2024-12-30 上午 11:17 ACQUA 6.1.100

Limits

lower

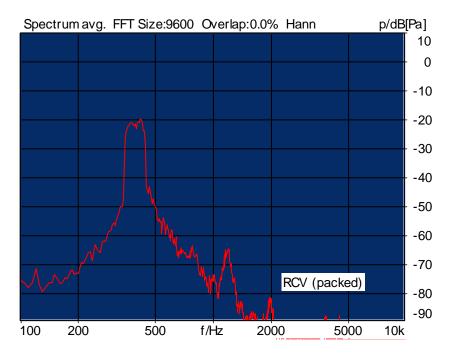
20.00 dB

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Report No.: HA4O3002B

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): 32.44 dB (2.39%) Ok

Ok

2024-12-30 上午 11:37 ACQUA 6.1.100

Limits

lower

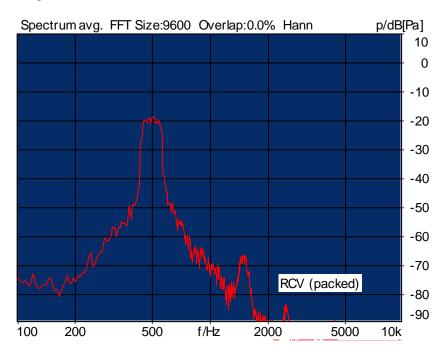
20.00 dB

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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): 31.69 dB (2.60%) Ok

Ok

2024-12-30 上午 11:37 ACQUA 6.1.100

Limits

lower

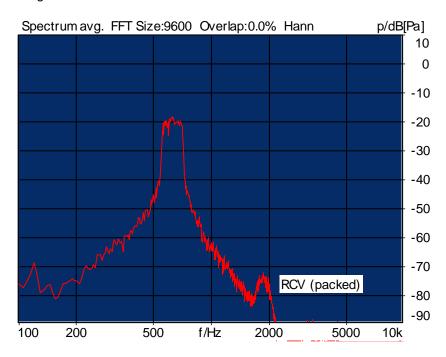
20.00 dB

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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): 28.92 dB (3.58%) Ok

Ok

2024-12-30 上午 11:38 ACQUA 6.1.100

Limits

lower

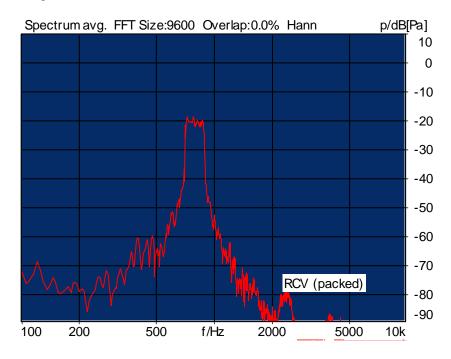
20.00 dB

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Report No.: HA4O3002B

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): 30.84 dB (2.87%) Ok

Ok

2024-12-30 上午 11:38 ACQUA 6.1.100

Limits

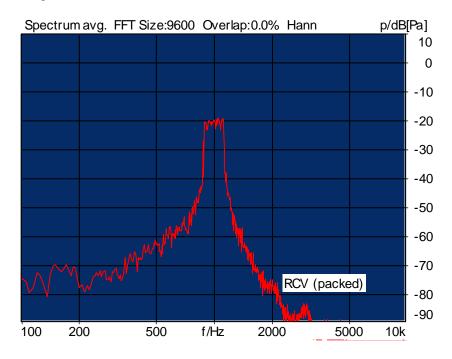
lower

20.00 dB

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Report No.: HA4O3002B 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): 27.19 dB (4.37%) Ok

Ok

2024-12-30 上午 11:39 ACQUA 6.1.100

Limits

lower

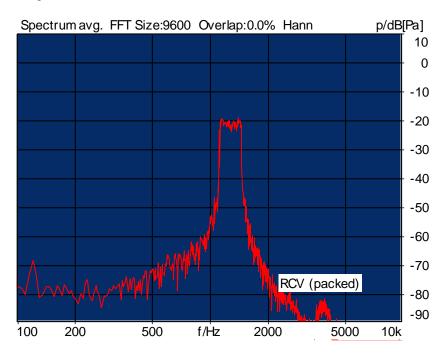
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 27.06 dB (4.43%) Ok

Ok

2024-12-30 上午 11:40 ACQUA 6.1.100

Limits

lower

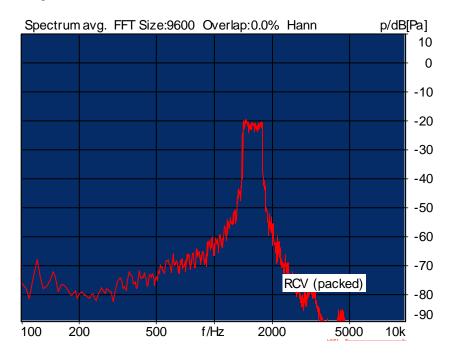
20.00 dB

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Report No.: HA4O3002B

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): 27.00 dB (4.47%) Ok

Ok

2024-12-30 上午 11:40 ACQUA 6.1.100

Limits

lower

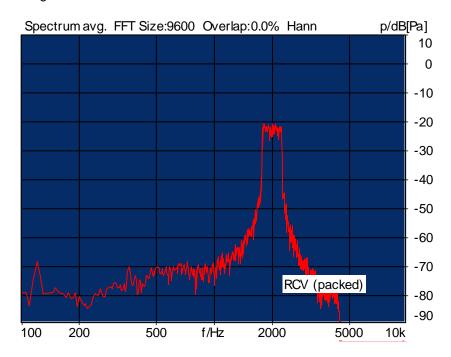
20.00 dB

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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

Report No.: HA4O3002B



Distortion (Noise) RCV (packed): 27.05 dB (4.44%) Ok

Ok

2024-12-30 上午 11:41 ACQUA 6.1.100

Limits

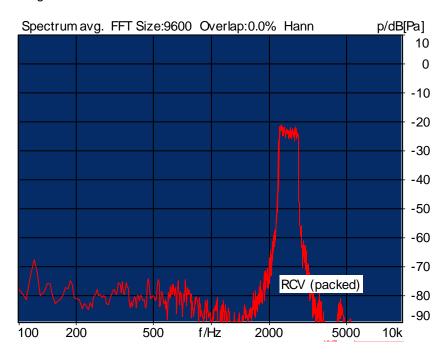
lower

20.00 dB

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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): 34.92 dB (1.80%) Ok

Ok

2024-12-30 上午 11:41 ACQUA 6.1.100

Limits

lower

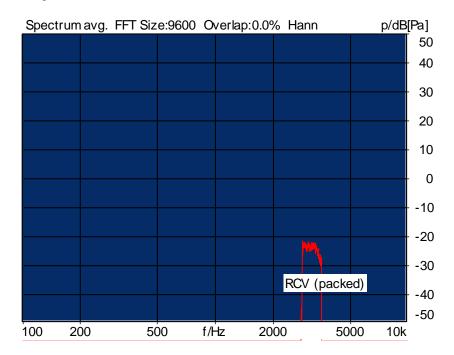
20.00 dB

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Report No.: HA4O3002B

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): 45.21 dB (0.55%) Ok

Ok

2024-12-30 上午 11:42 ACQUA 6.1.100

Limits

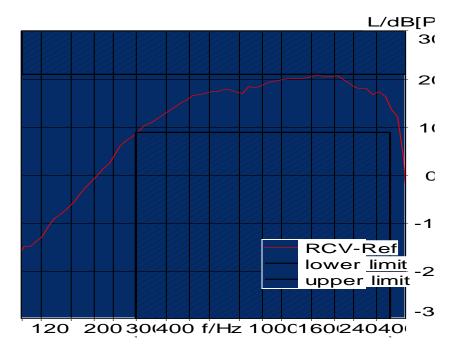
lower

20.00 dB

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5.3 Frequency Response 8N FF HANB

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



Absolute minimal distance

0.16 dB at 1747.8 Hz Ok

Ok

2024-12-30 上午 11:46 ACQUA 6.1.100

Limits

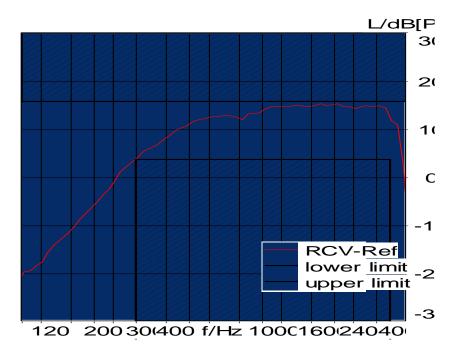
lower

Fit into tolerance

Form version: 231017 Page C25 of C30

5.3 Frequency Response 2N FF HANB

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



Absolute minimal distance

0.45 dB at 1747.8 Hz Ok

Ok

2024-12-30 上午 11:42 ACQUA 6.1.100

Limits

lower

Fit into tolerance

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<Evaluation results for KDB 285076 D05 2.b>

#2 WiFi 6GHz AMR NB 4.75kbps

SMD	Status	Single Value Description	Single Value
Overall Receive Delay NB	Done	Delay (Cross) [ms]	239.8
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	86.53
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	81.11

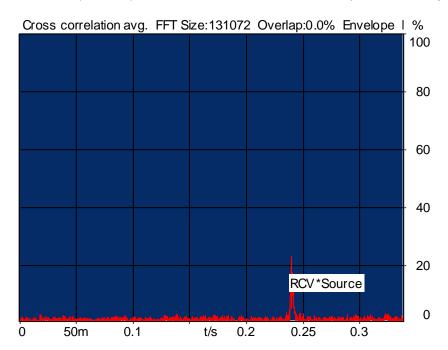
Report No.:HA4O3002B

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Overall Receive Delay NB

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



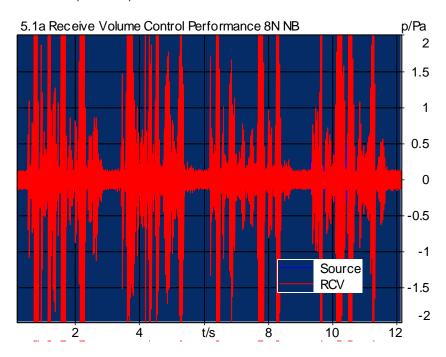
Channel	Delay	Correlation
RCV*Source	239.8 ms	22.92 %

2024-12-30 下午 02:16 ACQUA 6.1.100

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5.1a Receive Volume Control Performance 8N NB

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



Channel	Speech level	Activity	
RCV	86.53 dB[SPL]	79.99%	Ok

Ok

2024-12-30 下午 02:21 ACQUA 6.1.100

Limits

lower
76.00 dB[SPL]

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Report No.:HA4O3002B

5.1b Receive Volume Control Performance 2N NB

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



Channel	Speech level	Activity	
RCV	81.11 dB[SPL]	79.81%	Ok

Ok

2024-12-30 下午 02:18 ACQUA 6.1.100

Limits

lower
76.00 dB[SPL]

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