|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Techniques |  | SNR(dB) | LLR | SNRseg | WSS | PESQ |
|  |  | 0 | 0.6762 | -5.4671 | 46.8837 | 1.0766 |
| mms\_mmse\_spzc\_snru |  | 5 | 0.5460 | -5.4961 | 36.0635 | 1.3026 |
|  | F | 10 | 0.4346 | -5.5020 | 27.2988 | 1.4943 |
|  | A | 15 | 0.3422 | -5.5022 | 20.8654 | 1.6695 |
|  | C |  |  |  |  |  |
|  | T | 0 | 0.7094 | -5.3243 | 47.0421 | 1.1023 |
| mms\_smpo | O | 5 | 0.5887 | -5.3412 | 36.5441 | 1.3018 |
|  | R | 10 | 0.5029 | -5.3822 | 28.5345 | 1.4509 |
|  | Y | 15 | 0.4467 | -5.4030 | 24.2364 | 1.5366 |
|  |  |  |  |  |  |  |
|  |  | 0 | 0.7042 | 2.5375 | 35.0857 | 1.3180 |
| ics | N | 5 | 0.4757 | 3.6153 | 27.1218 | 1.5097 |
|  | O | 10 | 0.3148 | 4.9376 | 20.0032 | 1.7164 |
|  | I | 15 | 0.1845 | 6.4363 | 14.8890 | 1.9138 |
|  | S |  |  |  |  |  |
|  | E | 0 | 0.8803 | -5.5556 | 48.2617 | 0.8829 |
| kalman |  | 5 | 0.8508 | -5.5555 | 38.8897 | 1.1504 |
|  |  | 10 | 0.7877 | -5.5373 | 29.6399 | 1.3079 |
|  |  | 15 | 0.6860 | -5.2448 | 22.7929 | 1.3265 |
|  |  |  |  |  |  |  |
|  |  | 0 | 1.2989 | -1.1585 | 83.0606 | 0.3172 |
| weiner |  | 5 | 1.3105 | -0.9271 | 77.9919 | 0.3085 |
|  |  | 10 | 1.3245 | -0.7337 | 73.5915 | 0.2799 |
|  |  | 15 | 1.3290 | -0.4592 | 70.6374 | 0.2600 |
|  |  |  |  |  |  |  |
|  |  | 0 | 1.1611 | 0.2558 | 32.2146 | 0.7693 |
| nlm |  | 5 | 1.1014 | 0.3686 | 27.8413 | 1.0075 |
|  |  | 10 | 1.0596 | 0.4868 | 24.3258 | 1.2222 |
|  |  | 15 | 1.1048 | 0.5789 | 22.3984 | 1.3738 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Techniques |  | SNR(dB) | LLR | SNRseg | WSS | PESQ |
|  |  | 0 | 0.1600 | -5.5468 | 23.4582 | 1.9229 |
| mms\_mmse\_spzc\_snru |  | 5 | 0.1512 | -5.5526 | 17.2508 | 2.0680 |
|  |  | 10 | 0.1499 | -5.5519 | 12.5906 | 2.1845 |
|  | V | 15 | 0.1504 | -5.5488 | 9.4747 | 2.2633 |
|  | O |  |  |  |  |  |
|  | L | 0 | 0.3693 | -5.4731 | 27.9305 | 1.6231 |
| mms\_smpo | V | 5 | 0.3496 | -5.4603 | 23.2281 | 1.6613 |
|  | O | 10 | 0.3307 | -5.4317 | 19.8876 | 1.6871 |
|  |  | 15 | 0.3163 | -5.3917 | 17.4138 | 1.6973 |
|  |  |  |  |  |  |  |
|  | N | 0 | 0.1486 | 8.3593 | 9.2850 | 2.1395 |
| ics | O | 5 | 0.1139 | 10.0614 | 6.7089 | 2.2470 |
|  | I | 10 | 0.0876 | 11.6704 | 4.8805 | 2.3330 |
|  | S | 15 | 0.0622 | 12.7644 | 3.6643 | 2.3970 |
|  | E |  |  |  |  |  |
|  |  | 0 | 0.7422 | -5.5502 | 35.0734 | 1.5276 |
| kalman |  | 5 | 0.7595 | -5.4928 | 31.6560 | 1.4661 |
|  |  | 10 | 0.7275 | -5.1360 | 28.3979 | 1.3404 |
|  |  | 15 | 0.7305 | -4.1137 | 24.5483 | 1.2468 |
|  |  |  |  |  |  |  |
|  |  | 0 | 1.2966 | -1.0856 | 80.3836 | 0.4595 |
| weiner |  | 5 | 1.2960 | -0.8705 | 75.8040 | 0.3373 |
|  |  | 10 | 1.3069 | -0.6682 | 73.0403 | 0.3933 |
|  |  | 15 | 1.3141 | -0.4083 | 71.3118 | 0.4228 |
|  |  |  |  |  |  |  |
|  |  | 0 | 2.6972 | 0.2683 | 37.0802 | 1.2836 |
| nlm |  | 5 | 2.3411 | 0.3545 | 31.2247 | 1.3851 |
|  |  | 10 | 2.0726 | 0.4495 | 28.0676 | 1.4323 |
|  |  | 15 | 1.8606 | 0.5372 | 26.8546 | 1.4324 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Techniques |  | SNR(dB) | LLR | SNRseg | WSS | PESQ |
|  |  | 0 | 0.7448 | -5.5098 | 29.6239 | 1.3120 |
| mms\_mmse\_spzc\_snru |  | 5 | 0.6028 | -5.4821 | 23.3782 | 1.5265 |
|  | W | 10 | 0.4759 | -5.4574 | 18.4506 | 1.6963 |
|  | H | 15 | 0.3624 | -5.4588 | 14.5168 | 1.8428 |
|  | I |  |  |  |  |  |
|  | T | 0 | 0.6931 | -5.4623 | 35.0988 | 1.3324 |
| mms\_smpo | E | 5 | 0.5842 | -5.4374 | 30.1396 | 1.4659 |
|  |  | 10 | 0.4968 | -5.4287 | 25.6964 | 1.5502 |
|  |  | 15 | 0.4263 | -5.4021 | 22.1591 | 1.6005 |
|  | N |  |  |  |  |  |
|  | O | 0 | 0.8182 | 3.1560 | 29.6253 | 1.4239 |
| ics | I | 5 | 0.6352 | 4.2366 | 24.2246 | 1.6245 |
|  | S | 10 | 0.5027 | 5.4851 | 19.1063 | 1.8230 |
|  | E | 15 | 0.3644 | 6.8315 | 13.7504 | 2.0059 |
|  |  |  |  |  |  |  |
|  |  | 0 | 0.9928 | -5.5556 | 44.4095 | 0.9621 |
| kalman |  | 5 | 0.7068 | -5.5556 | 36.7797 | 1.2396 |
|  |  | 10 | 0.5770 | -5.5556 | 30.0636 | 1.5700 |
|  |  | 15 | 0.5462 | -5.5556 | 23.5653 | 1.7443 |
|  |  |  |  |  |  |  |
|  |  | 0 | 1.4333 | -1.2368 | 78.9025 | 0.3257 |
| weiner |  | 5 | 1.4338 | -0.9789 | 75.4640 | 0.3010 |
|  |  | 10 | 1.4346 | -0.7944 | 72.9174 | 0.2751 |
|  |  | 15 | 1.4148 | -0.5433 | 71.0224 | 0.3023 |
|  |  |  |  |  |  |  |
|  |  | 0 | 0.8742 | 0.1987 | 46.5939 | 1.1572 |
| nlm |  | 5 | 0.9869 | 0.2817 | 42.8506 | 1.2312 |
|  |  | 10 | 1.0441 | 0.3664 | 39.0101 | 1.2947 |
|  |  | 15 | 1.1130 | 0.4510 | 35.1788 | 1.4357 |