

**Supplemental Material S5.** Masker condition signal recognition slopes\* in adults (ordering of data is consistent with Supplemental Material S3).

Steady-state noise	Temporally modulated	Spectrally modulated	Two-talker
1.5	1.27	2.59	2.29
1.48	2.36	2.53	4.85
1.42	2.62	2.1	4.87
2.46	2.07	2.08	3.62
1.98	3.25	1.92	4.34
1.05	1.79	2.42	5.84
1.83	2.06	2.32	2.26
1.74	7.12	2.78	3.16
0.87	2.20	1.64	3.35
1.67	2.40	2.74	1.38
2.11	2.92	2.02	3.30
1.69	3.52	3.4	5.22
2.76	2.63	2.39	5.50
2.09	0.95	1.96	4.28
1.80	2.35	2.66	4.16

\*Slope is the rate of change in performance when progressing from easy to difficult listening conditions. In this case the slope parameter,  $\beta$ , was estimated by fitting a logit function,  $y = \frac{1}{1+e^{-(x-\alpha)/\beta}}$ , where y is the proportion correct, x is the signal strength (dB SNR), and  $\alpha$  is the threshold parameter (dB SNR).