Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	SNR	3		2
	Program	6		5
	Azimuth	2		1
	SNR * Program	18		10
	SNR * Azimuth	6		2
	Program * Azimuth	12		5
	SNR * Program * Azimuth	36		10
Random Effects	Audiogram	4	Variance Components	1
Residual				1
Total		88		38

a. Dependent Variable: pMOS.

Information Criteria[a]

-2 Restricted Log Likelihood	391.20452104
Akaike's Information Criterion (AIC)	395.20452104
Hurvich and Tsai's Criterion (AICC)	395.21530271
Bozdogan's Criterion (CAIC)	407.23953333
Schwarz's Bayesian Criterion (BIC)	405.23953333

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: pMOS.

Coefficients of Determination

Pseudo-R Square Measures	Marginal	.614
	Conditional	.619

Intraclass Correlation Coefficients

Overall ICCs	Adjusted	.011
	Conditional	.004

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	3.000	13161.944	<.001
SNR	2	1113	562.194	<.001
Program	5	1113	100.148	<.001
Azimuth	1	1113	18.026	<.001
SNR * Program	10	1113.000	1.723	.071
SNR * Azimuth	2	1113	2.054	.129
Program * Azimuth	5	1113	33.014	<.001
SNR * Program * Azimuth	10	1113.000	2.439	.007

a. Dependent Variable: pMOS.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		.074	.003
Audiogram	Variance	.001	.001

a. Dependent Variable: pMOS.

Estimated Marginal Means

1. SNR

Estimates[a]

SNR	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
-5	1.586	.020	6.471	1.538	1.634
0	1.870	.020	6.471	1.821	1.918
5	2.242	.020	6.471	2.194	2.291

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

(I) SNR	(J) SNR	Mean Difference (I-J)	Std. Error	df	Sig.[c]	95% Confidence Interval for Difference[c]	
						Lower Bound	Upper Bound
-5	0	-.284*	.020	1113	<.001	-.331	-.237
	5	-.657*	.020	1113	<.001	-.704	-.609
0	-5	.284*	.020	1113	<.001	.237	.331
	5	-.373*	.020	1113	<.001	-.420	-.325
5	-5	.657*	.020	1113	<.001	.609	.704
	0	.373*	.020	1113	<.001	.325	.420

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
2	1113.000	562.194	<.001

The F tests the effect of SNR. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.

2. Program

Estimates[a]

Program	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
No Processing	1.686	.024	14.109	1.634	1.739
Beam	1.806	.024	14.109	1.754	1.858
Beam + NoiseBlock	1.862	.024	14.109	1.810	1.915
DNN	1.979	.024	14.109	1.927	2.031
NoiseBlock	1.811	.024	14.109	1.759	1.864
Beam + DNN	2.251	.024	14.109	2.199	2.303

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
No Processing	Beam	-.119*	.028	1113	<.001
	Beam + NoiseBlock	-.176*	.028	1113	<.001
	DNN	-.293*	.028	1113	<.001
	NoiseBlock	-.125*	.028	1113	<.001
	Beam + DNN	-.564*	.028	1113.000	<.001
Beam	No Processing	.119*	.028	1113	<.001
	Beam + NoiseBlock	-.056	.028	1113	.638
	DNN	-.173*	.028	1113	<.001
	NoiseBlock	-.005	.028	1113	1.000
	Beam + DNN	-.445*	.028	1113.000	<.001
Beam + NoiseBlock	No Processing	.176*	.028	1113	<.001
	Beam	.056	.028	1113	.638
	DNN	-.117*	.028	1113	<.001
	NoiseBlock	.051	.028	1113	.996
	Beam + DNN	-.389*	.028	1113.000	<.001
DNN	No Processing	.293*	.028	1113	<.001
	Beam	.173*	.028	1113	<.001
	Beam + NoiseBlock	.117*	.028	1113	<.001
	NoiseBlock	.168*	.028	1113	<.001
	Beam + DNN	-.272*	.028	1113.000	<.001
NoiseBlock	No Processing	.125*	.028	1113	<.001
	Beam	.005	.028	1113	1.000
	Beam + NoiseBlock	-.051	.028	1113	.996
	DNN	-.168*	.028	1113	<.001
	Beam + DNN	-.440*	.028	1113.000	<.001
Beam + DNN	No Processing	.564*	.028	1113.000	<.001
	Beam	.445*	.028	1113.000	<.001
	Beam + NoiseBlock	.389*	.028	1113.000	<.001
	DNN	.272*	.028	1113.000	<.001
	NoiseBlock	.440*	.028	1113.000	<.001

Pairwise Comparisons[a]

(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
No Processing	Beam	-.201	-.038
	Beam + NoiseBlock	-.258	-.094
	DNN	-.374	-.211
	NoiseBlock	-.207	-.043
	Beam + DNN	-.646	-.483
Beam	No Processing	.038	.201
	Beam + NoiseBlock	-.138	.025
	DNN	-.255	-.091
	NoiseBlock	-.087	.076
	Beam + DNN	-.527	-.363
Beam + NoiseBlock	No Processing	.094	.258
	Beam	-.025	.138
	DNN	-.198	-.035
	NoiseBlock	-.031	.133
	Beam + DNN	-.470	-.307
DNN	No Processing	.211	.374
	Beam	.091	.255
	Beam + NoiseBlock	.035	.198
	NoiseBlock	.086	.249
	Beam + DNN	-.354	-.190
NoiseBlock	No Processing	.043	.207
	Beam	-.076	.087
	Beam + NoiseBlock	-.133	.031
	DNN	-.249	-.086
	Beam + DNN	-.521	-.358
Beam + DNN	No Processing	.483	.646
	Beam	.363	.527
	Beam + NoiseBlock	.307	.470
	DNN	.190	.354
	NoiseBlock	.358	.521

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
5	1113	100.148	<.001

The F tests the effect of Program. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.

3. Azimuth

Estimates[a]

Azimuth	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
0_degrees	1.865	.018	4.572	1.817	1.914
90_degrees	1.933	.018	4.572	1.885	1.982

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

(I) Azimuth	(J) Azimuth	Mean Difference (I-J)	Std. Error	df	Sig.[c]	95% Confidence Interval for [c]
						Lower Bound
0_degrees	90_degrees	-.068*	.016	1113	<.001	-.100
90_degrees	0_degrees	.068*	.016	1113	<.001	.037

Pairwise Comparisons[a]

(I) Azimuth	(J) Azimuth	95% Confidence Interval for [c]
		Upper Bound
0_degrees	90_degrees	-.037
90_degrees	0_degrees	.100

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
1	1113	18.026	<.001

The F tests the effect of Azimuth. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.

4. SNR * Program

Estimates[a]

SNR	Program	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
-5	No Processing	1.442	.037	71.548	1.368	1.515
	Beam	1.499	.037	71.548	1.426	1.573
	Beam + NoiseBlock	1.548	.037	71.548	1.475	1.622
	DNN	1.663	.037	71.548	1.589	1.736
	NoiseBlock	1.507	.037	71.548	1.433	1.581
	Beam + DNN	1.856	.037	71.548	1.782	1.929
0	No Processing	1.652	.037	71.548	1.578	1.726
	Beam	1.773	.037	71.548	1.699	1.846
	Beam + NoiseBlock	1.834	.037	71.548	1.760	1.907
	DNN	1.936	.037	71.548	1.863	2.010
	NoiseBlock	1.775	.037	71.548	1.701	1.848
	Beam + DNN	2.249	.037	71.548	2.175	2.323
5	No Processing	1.965	.037	71.548	1.892	2.039
	Beam	2.146	.037	71.548	2.072	2.219
	Beam + NoiseBlock	2.205	.037	71.548	2.131	2.278
	DNN	2.338	.037	71.548	2.264	2.412
	NoiseBlock	2.152	.037	71.548	2.078	2.226
	Beam + DNN	2.648	.037	71.548	2.574	2.722

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
-5	No Processing	Beam	-.058	.048	1113	1.000
		Beam + NoiseBlock	-.107	.048	1113	.402
		DNN	-.221*	.048	1113	<.001
		NoiseBlock	-.065	.048	1113	1.000
		Beam + DNN	-.414*	.048	1113	<.001
	Beam	No Processing	.058	.048	1113	1.000
		Beam + NoiseBlock	-.049	.048	1113	1.000
		DNN	-.163*	.048	1113	.011
		NoiseBlock	-.008	.048	1113	1.000
		Beam + DNN	-.356*	.048	1113	<.001
	Beam + NoiseBlock	No Processing	.107	.048	1113	.402
		Beam	.049	.048	1113	1.000
		DNN	-.114	.048	1113	.268
		NoiseBlock	.041	.048	1113	1.000
		Beam + DNN	-.307*	.048	1113	<.001
	DNN	No Processing	.221*	.048	1113	<.001
		Beam	.163*	.048	1113	.011
		Beam + NoiseBlock	.114	.048	1113	.268
		NoiseBlock	.155*	.048	1113	.019
		Beam + DNN	-.193*	.048	1113	<.001
	NoiseBlock	No Processing	.065	.048	1113	1.000
		Beam	.008	.048	1113	1.000
		Beam + NoiseBlock	-.041	.048	1113	1.000
		DNN	-.155*	.048	1113	.019
		Beam + DNN	-.348*	.048	1113	<.001
	Beam + DNN	No Processing	.414*	.048	1113	<.001
		Beam	.356*	.048	1113	<.001
		Beam + NoiseBlock	.307*	.048	1113	<.001
		DNN	.193*	.048	1113	<.001
		NoiseBlock	.348*	.048	1113	<.001
0	No Processing	Beam	-.121	.048	1113	.186
		Beam + NoiseBlock	-.182*	.048	1113	.003
		DNN	-.284*	.048	1113	<.001
		NoiseBlock	-.123	.048	1113	.165
		Beam + DNN	-.597*	.048	1113	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
-5	No Processing	Beam	-.199	.084
		Beam + NoiseBlock	-.248	.035
		DNN	-.362	-.079
		NoiseBlock	-.207	.076
		Beam + DNN	-.555	-.272
	Beam	No Processing	-.084	.199
		Beam + NoiseBlock	-.191	.092
		DNN	-.305	-.022
		NoiseBlock	-.149	.134
		Beam + DNN	-.498	-.215
	Beam + NoiseBlock	No Processing	-.035	.248
		Beam	-.092	.191
		DNN	-.256	.027
		NoiseBlock	-.100	.183
		Beam + DNN	-.449	-.166
	DNN	No Processing	.079	.362
		Beam	.022	.305
		Beam + NoiseBlock	-.027	.256
		NoiseBlock	.014	.297
		Beam + DNN	-.335	-.052
	NoiseBlock	No Processing	-.076	.207
		Beam	-.134	.149
		Beam + NoiseBlock	-.183	.100
		DNN	-.297	-.014
		Beam + DNN	-.490	-.207
	Beam + DNN	No Processing	.272	.555
		Beam	.215	.498
		Beam + NoiseBlock	.166	.449
		DNN	.052	.335
		NoiseBlock	.207	.490
0	No Processing	Beam	-.262	.021
		Beam + NoiseBlock	-.323	-.040
		DNN	-.426	-.143
		NoiseBlock	-.264	.019
		Beam + DNN	-.738	-.455

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
	Beam	No Processing	.121	.048	1113	.186
		Beam + NoiseBlock	-.061	.048	1113	1.000
		DNN	-.164*	.048	1113	.010
		NoiseBlock	-.002	.048	1113	1.000
		Beam + DNN	-.476*	.048	1113	<.001
	Beam + NoiseBlock	No Processing	.182*	.048	1113	.003
		Beam	.061	.048	1113	1.000
		DNN	-.103	.048	1113	.498
		NoiseBlock	.059	.048	1113	1.000
		Beam + DNN	-.415*	.048	1113	<.001
	DNN	No Processing	.284*	.048	1113	<.001
		Beam	.164*	.048	1113	.010
		Beam + NoiseBlock	.103	.048	1113	.498
		NoiseBlock	.162*	.048	1113	.012
		Beam + DNN	-.313*	.048	1113	<.001
	NoiseBlock	No Processing	.123	.048	1113	.165
		Beam	.002	.048	1113	1.000
		Beam + NoiseBlock	-.059	.048	1113	1.000
		DNN	-.162*	.048	1113	.012
		Beam + DNN	-.474*	.048	1113	<.001
	Beam + DNN	No Processing	.597*	.048	1113	<.001
		Beam	.476*	.048	1113	<.001
		Beam + NoiseBlock	.415*	.048	1113	<.001
		DNN	.313*	.048	1113	<.001
		NoiseBlock	.474*	.048	1113	<.001
5	No Processing	Beam	-.180*	.048	1113	.003
		Beam + NoiseBlock	-.239*	.048	1113	<.001
		DNN	-.373*	.048	1113	<.001
		NoiseBlock	-.187*	.048	1113	.002
		Beam + DNN	-.683*	.048	1113.000	<.001
	Beam	No Processing	.180*	.048	1113	.003
		Beam + NoiseBlock	-.059	.048	1113	1.000
		DNN	-.193*	.048	1113	.001
		NoiseBlock	-.006	.048	1113	1.000
		Beam + DNN	-.502*	.048	1113.000	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
	Beam	No Processing	-.021	.262
		Beam + NoiseBlock	-.203	.080
		DNN	-.305	-.022
		NoiseBlock	-.143	.140
		Beam + DNN	-.618	-.335
	Beam + NoiseBlock	No Processing	.040	.323
		Beam	-.080	.203
		DNN	-.244	.039
		NoiseBlock	-.082	.201
		Beam + DNN	-.557	-.274
	DNN	No Processing	.143	.426
		Beam	.022	.305
		Beam + NoiseBlock	-.039	.244
		NoiseBlock	.020	.303
		Beam + DNN	-.454	-.171
	NoiseBlock	No Processing	-.019	.264
		Beam	-.140	.143
		Beam + NoiseBlock	-.201	.082
		DNN	-.303	-.020
		Beam + DNN	-.616	-.333
	Beam + DNN	No Processing	.455	.738
		Beam	.335	.618
		Beam + NoiseBlock	.274	.557
		DNN	.171	.454
		NoiseBlock	.333	.616
5	No Processing	Beam	-.322	-.039
		Beam + NoiseBlock	-.381	-.098
		DNN	-.514	-.231
		NoiseBlock	-.328	-.045
		Beam + DNN	-.824	-.541
	Beam	No Processing	.039	.322
		Beam + NoiseBlock	-.201	.082
		DNN	-.334	-.051
		NoiseBlock	-.148	.135
		Beam + DNN	-.644	-.361

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
	Beam + NoiseBlock	No Processing	.239*	.048	1113	<.001
		Beam	.059	.048	1113	1.000
		DNN	-.134	.048	1113	.084
		NoiseBlock	.053	.048	1113	1.000
		Beam + DNN	-.443*	.048	1113.000	<.001
	DNN	No Processing	.373*	.048	1113	<.001
		Beam	.193*	.048	1113	.001
		Beam + NoiseBlock	.134	.048	1113	.084
		NoiseBlock	.186*	.048	1113	.002
		Beam + DNN	-.310*	.048	1113.000	<.001
	NoiseBlock	No Processing	.187*	.048	1113	.002
		Beam	.006	.048	1113	1.000
		Beam + NoiseBlock	-.053	.048	1113	1.000
		DNN	-.186*	.048	1113	.002
		Beam + DNN	-.496*	.048	1113.000	<.001
	Beam + DNN	No Processing	.683*	.048	1113.000	<.001
		Beam	.502*	.048	1113.000	<.001
		Beam + NoiseBlock	.443*	.048	1113.000	<.001
		DNN	.310*	.048	1113.000	<.001
		NoiseBlock	.496*	.048	1113.000	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
	Beam + NoiseBlock	No Processing	.098	.381
		Beam	-.082	.201
		DNN	-.275	.008
		NoiseBlock	-.089	.194
		Beam + DNN	-.585	-.302
	DNN	No Processing	.231	.514
		Beam	.051	.334
		Beam + NoiseBlock	-.008	.275
		NoiseBlock	.045	.328
		Beam + DNN	-.451	-.168
	NoiseBlock	No Processing	.045	.328
		Beam	-.135	.148
		Beam + NoiseBlock	-.194	.089
		DNN	-.328	-.045
		Beam + DNN	-.638	-.355
	Beam + DNN	No Processing	.541	.824
		Beam	.361	.644
		Beam + NoiseBlock	.302	.585
		DNN	.168	.451
		NoiseBlock	.355	.638

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

SNR	Numerator df	Denominator df	F	Sig.
-5	5	1113.000	19.780	<.001
0	5	1113.000	37.234	<.001
5	5	1113.000	46.579	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.

5. SNR * Azimuth[a]

SNR	Azimuth	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
-5	0_degrees	1.536	.024	14.109	1.484	1.589
	90_degrees	1.635	.024	14.109	1.583	1.688
0	0_degrees	1.829	.024	14.109	1.776	1.881
	90_degrees	1.911	.024	14.109	1.858	1.963
5	0_degrees	2.231	.024	14.109	2.178	2.283
	90_degrees	2.254	.024	14.109	2.202	2.306

a. Dependent Variable: pMOS.

6. Program * Azimuth

Estimates[a]

Program	Azimuth	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
No Processing	0_degrees	1.569	.031	37.770	1.506	1.633
	90_degrees	1.804	.031	37.770	1.740	1.867
Beam	0_degrees	1.918	.031	37.770	1.855	1.982
	90_degrees	1.693	.031	37.770	1.630	1.757
Beam + NoiseBlock	0_degrees	1.913	.031	37.770	1.850	1.976
	90_degrees	1.812	.031	37.770	1.748	1.875
DNN	0_degrees	1.783	.031	37.770	1.720	1.847
	90_degrees	2.175	.031	37.770	2.111	2.238
NoiseBlock	0_degrees	1.753	.031	37.770	1.690	1.817
	90_degrees	1.869	.031	37.770	1.806	1.933
Beam + DNN	0_degrees	2.254	.031	37.770	2.191	2.318
	90_degrees	2.248	.031	37.770	2.184	2.311

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
0_degrees	No Processing	Beam	-.349*	.039	1113
		Beam + NoiseBlock	-.344*	.039	1113
		DNN	-.214*	.039	1113
		NoiseBlock	-.184*	.039	1113
		Beam + DNN	-.685*	.039	1113.000
	Beam	No Processing	.349*	.039	1113
		Beam + NoiseBlock	.005	.039	1113
		DNN	.135*	.039	1113
		NoiseBlock	.165*	.039	1113
		Beam + DNN	-.336*	.039	1113.000
	Beam + NoiseBlock	No Processing	.344*	.039	1113
		Beam	-.005	.039	1113
		DNN	.130*	.039	1113
		NoiseBlock	.160*	.039	1113
		Beam + DNN	-.341*	.039	1113.000
	DNN	No Processing	.214*	.039	1113
		Beam	-.135*	.039	1113
		Beam + NoiseBlock	-.130*	.039	1113
		NoiseBlock	.030	.039	1113
		Beam + DNN	-.471*	.039	1113.000
	NoiseBlock	No Processing	.184*	.039	1113
		Beam	-.165*	.039	1113
		Beam + NoiseBlock	-.160*	.039	1113
		DNN	-.030	.039	1113
		Beam + DNN	-.501*	.039	1113.000
	Beam + DNN	No Processing	.685*	.039	1113.000
		Beam	.336*	.039	1113.000
		Beam + NoiseBlock	.341*	.039	1113.000
		DNN	.471*	.039	1113.000
		NoiseBlock	.501*	.039	1113.000
90_degrees	No Processing	Beam	.110	.039	1113
		Beam + NoiseBlock	-.008	.039	1113
		DNN	-.371*	.039	1113
		NoiseBlock	-.066	.039	1113
		Beam + DNN	-.444*	.039	1113

Pairwise Comparisons[a]

Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for Difference[c]	
				Lower Bound	Upper Bound
0_degrees	No Processing	Beam	<.001	-.465	-.234
		Beam + NoiseBlock	<.001	-.459	-.228
		DNN	<.001	-.330	-.098
		NoiseBlock	<.001	-.300	-.069
		Beam + DNN	<.001	-.800	-.569
	Beam	No Processing	<.001	.234	.465
		Beam + NoiseBlock	1.000	-.110	.121
		DNN	.009	.020	.251
		NoiseBlock	<.001	.049	.280
		Beam + DNN	<.001	-.451	-.220
	Beam + NoiseBlock	No Processing	<.001	.228	.459
		Beam	1.000	-.121	.110
		DNN	.015	.014	.245
		NoiseBlock	<.001	.044	.275
		Beam + DNN	<.001	-.457	-.226
	DNN	No Processing	<.001	.098	.330
		Beam	.009	-.251	-.020
		Beam + NoiseBlock	.015	-.245	-.014
		NoiseBlock	1.000	-.086	.145
		Beam + DNN	<.001	-.586	-.355
	NoiseBlock	No Processing	<.001	.069	.300
		Beam	<.001	-.280	-.049
		Beam + NoiseBlock	<.001	-.275	-.044
		DNN	1.000	-.145	.086
		Beam + DNN	<.001	-.616	-.385
	Beam + DNN	No Processing	<.001	.569	.800
		Beam	<.001	.220	.451
		Beam + NoiseBlock	<.001	.226	.457
		DNN	<.001	.355	.586
		NoiseBlock	<.001	.385	.616
90_degrees	No Processing	Beam	.077	-.005	.226
		Beam + NoiseBlock	1.000	-.123	.108
		DNN	<.001	-.487	-.256
		NoiseBlock	1.000	-.181	.050
		Beam + DNN	<.001	-.560	-.328

Pairwise Comparisons[a]

Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
	Beam	No Processing	-.110	.039	1113
		Beam + NoiseBlock	-.118*	.039	1113
		DNN	-.481*	.039	1113
		NoiseBlock	-.176*	.039	1113
		Beam + DNN	-.554*	.039	1113
	Beam + NoiseBlock	No Processing	.008	.039	1113
		Beam	.118*	.039	1113
		DNN	-.363*	.039	1113
		NoiseBlock	-.058	.039	1113
		Beam + DNN	-.436*	.039	1113
	DNN	No Processing	.371*	.039	1113
		Beam	.481*	.039	1113
		Beam + NoiseBlock	.363*	.039	1113
		NoiseBlock	.306*	.039	1113
		Beam + DNN	-.073	.039	1113
	NoiseBlock	No Processing	.066	.039	1113
		Beam	.176*	.039	1113
		Beam + NoiseBlock	.058	.039	1113
		DNN	-.306*	.039	1113
		Beam + DNN	-.378*	.039	1113
	Beam + DNN	No Processing	.444*	.039	1113
		Beam	.554*	.039	1113
		Beam + NoiseBlock	.436*	.039	1113
		DNN	.073	.039	1113
		NoiseBlock	.378*	.039	1113

Pairwise Comparisons[a]

Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for Difference[c]	
				Lower Bound	Upper Bound
	Beam	No Processing	.077	-.226	.005
		Beam + NoiseBlock	.041	-.234	-.003
		DNN	<.001	-.597	-.366
		NoiseBlock	<.001	-.291	-.060
		Beam + DNN	<.001	-.670	-.439
	Beam + NoiseBlock	No Processing	1.000	-.108	.123
		Beam	.041	.003	.234
		DNN	<.001	-.479	-.248
		NoiseBlock	1.000	-.173	.058
		Beam + DNN	<.001	-.552	-.321
	DNN	No Processing	<.001	.256	.487
		Beam	<.001	.366	.597
		Beam + NoiseBlock	<.001	.248	.479
		NoiseBlock	<.001	.190	.421
		Beam + DNN	.960	-.188	.043
	NoiseBlock	No Processing	1.000	-.050	.181
		Beam	<.001	.060	.291
		Beam + NoiseBlock	1.000	-.058	.173
		DNN	<.001	-.421	-.190
		Beam + DNN	<.001	-.494	-.263
	Beam + DNN	No Processing	<.001	.328	.560
		Beam	<.001	.439	.670
		Beam + NoiseBlock	<.001	.321	.552
		DNN	.960	-.043	.188
		NoiseBlock	<.001	.263	.494

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Azimuth	Numerator df	Denominator df	F	Sig.
0_degrees	5	1113.000	68.244	<.001
90_degrees	5	1113	64.918	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.

7. SNR * Program * Azimuth

Estimates[a]

SNR	Program	Azimuth	Mean	Std. Error	df	95% ... Lower Bound
-5	No Processing	0_degrees	1.362	.050	215.300	1.263
		90_degrees	1.521	.050	215.300	1.422
	Beam	0_degrees	1.519	.050	215.300	1.420
		90_degrees	1.480	.050	215.300	1.381
	Beam + NoiseBlock	0_degrees	1.537	.050	215.300	1.438
		90_degrees	1.560	.050	215.300	1.461
	DNN	0_degrees	1.488	.050	215.300	1.389
		90_degrees	1.837	.050	215.300	1.738
	NoiseBlock	0_degrees	1.470	.050	215.300	1.371
		90_degrees	1.544	.050	215.300	1.445
	Beam + DNN	0_degrees	1.842	.050	215.300	1.743
		90_degrees	1.869	.050	215.300	1.770
0	No Processing	0_degrees	1.553	.050	215.300	1.454
		90_degrees	1.751	.050	215.300	1.652
	Beam	0_degrees	1.890	.050	215.300	1.791
		90_degrees	1.656	.050	215.300	1.556
	Beam + NoiseBlock	0_degrees	1.885	.050	215.300	1.786
		90_degrees	1.782	.050	215.300	1.683
	DNN	0_degrees	1.717	.050	215.300	1.618
		90_degrees	2.156	.050	215.300	2.057
	NoiseBlock	0_degrees	1.695	.050	215.300	1.596
		90_degrees	1.854	.050	215.300	1.755
	Beam + DNN	0_degrees	2.232	.050	215.300	2.133
		90_degrees	2.266	.050	215.300	2.167
5	No Processing	0_degrees	1.793	.050	215.300	1.694
		90_degrees	2.138	.050	215.300	2.039

Estimates[a]

SNR	Program	Azimuth	95% ... Upper Bound
-5	No Processing	0_degrees	1.461
		90_degrees	1.620
	Beam	0_degrees	1.618
		90_degrees	1.579
	Beam + NoiseBlock	0_degrees	1.636
		90_degrees	1.659
	DNN	0_degrees	1.587
		90_degrees	1.936
	NoiseBlock	0_degrees	1.569
		90_degrees	1.643
	Beam + DNN	0_degrees	1.941
		90_degrees	1.968
0	No Processing	0_degrees	1.652
		90_degrees	1.850
	Beam	0_degrees	1.989
		90_degrees	1.755
	Beam + NoiseBlock	0_degrees	1.984
		90_degrees	1.881
	DNN	0_degrees	1.816
		90_degrees	2.255
	NoiseBlock	0_degrees	1.794
		90_degrees	1.953
	Beam + DNN	0_degrees	2.331
		90_degrees	2.365
5	No Processing	0_degrees	1.892
		90_degrees	2.237

Estimates[a]

SNR	Program	Azimuth	Mean	Std. Error	df	95% ... Lower Bound
	Beam	0_degrees	2.346	.050	215.300	2.247
		90_degrees	1.945	.050	215.300	1.846
	Beam + NoiseBlock	0_degrees	2.317	.050	215.300	2.218
		90_degrees	2.092	.050	215.300	1.993
	DNN	0_degrees	2.145	.050	215.300	2.046
		90_degrees	2.532	.050	215.300	2.433
	NoiseBlock	0_degrees	2.095	.050	215.300	1.996
		90_degrees	2.209	.050	215.300	2.110
	Beam + DNN	0_degrees	2.688	.050	215.300	2.589
		90_degrees	2.608	.050	215.300	2.509

Estimates[a]

SNR	Program	Azimuth	95% ... Upper Bound
	Beam	0_degrees	2.445
		90_degrees	2.044
	Beam + NoiseBlock	0_degrees	2.416
		90_degrees	2.191
	DNN	0_degrees	2.244
		90_degrees	2.631
	NoiseBlock	0_degrees	2.194
		90_degrees	2.308
	Beam + DNN	0_degrees	2.787
		90_degrees	2.707

a. Dependent Variable: pMOS.

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
-5	0_degrees	No Processing	Beam	-.157	.068	1113
			Beam + NoiseBlock	-.174	.068	1113
			DNN	-.126	.068	1113
			NoiseBlock	-.108	.068	1113
			Beam + DNN	-.480*	.068	1113
		Beam	No Processing	.157	.068	1113
			Beam + NoiseBlock	-.018	.068	1113
			DNN	.031	.068	1113
			NoiseBlock	.049	.068	1113
			Beam + DNN	-.323*	.068	1113
		Beam + NoiseBlock	No Processing	.174	.068	1113
			Beam	.018	.068	1113
			DNN	.048	.068	1113
			NoiseBlock	.067	.068	1113
			Beam + DNN	-.305*	.068	1113
		DNN	No Processing	.126	.068	1113
			Beam	-.031	.068	1113
			Beam + NoiseBlock	-.048	.068	1113
			NoiseBlock	.018	.068	1113
			Beam + DNN	-.354*	.068	1113
		NoiseBlock	No Processing	.108	.068	1113
			Beam	-.049	.068	1113
			Beam + NoiseBlock	-.067	.068	1113
			DNN	-.018	.068	1113
			Beam + DNN	-.372*	.068	1113
		Beam + DNN	No Processing	.480*	.068	1113
			Beam	.323*	.068	1113
			Beam + NoiseBlock	.305*	.068	1113
			DNN	.354*	.068	1113
			NoiseBlock	.372*	.068	1113
	90_degrees	No Processing	Beam	.041	.068	1113
			Beam + NoiseBlock	-.039	.068	1113
			DNN	-.315*	.068	1113
			NoiseBlock	-.023	.068	1113
			Beam + DNN	-.348*	.068	1113

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
-5	0_degrees	No Processing	Beam	.323	-.357
			Beam + NoiseBlock	.157	-.375
			DNN	.964	-.326
			NoiseBlock	1.000	-.308
			Beam + DNN	<.001	-.680
		Beam	No Processing	.323	-.043
			Beam + NoiseBlock	1.000	-.218
			DNN	1.000	-.170
			NoiseBlock	1.000	-.151
			Beam + DNN	<.001	-.523
		Beam + NoiseBlock	No Processing	.157	-.026
			Beam	1.000	-.182
			DNN	1.000	-.152
			NoiseBlock	1.000	-.133
			Beam + DNN	<.001	-.505
		DNN	No Processing	.964	-.074
			Beam	1.000	-.231
			Beam + NoiseBlock	1.000	-.249
			NoiseBlock	1.000	-.182
			Beam + DNN	<.001	-.554
		NoiseBlock	No Processing	1.000	-.092
			Beam	1.000	-.249
			Beam + NoiseBlock	1.000	-.267
			DNN	1.000	-.218
			Beam + DNN	<.001	-.572
		Beam + DNN	No Processing	<.001	.279
			Beam	<.001	.123
			Beam + NoiseBlock	<.001	.105
			DNN	<.001	.153
			NoiseBlock	<.001	.172
	90_degrees	No Processing	Beam	1.000	-.159
			Beam + NoiseBlock	1.000	-.239
			DNN	<.001	-.516
			NoiseBlock	1.000	-.223
			Beam + DNN	<.001	-.548

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
-5	0_degrees	No Processing	Beam	.043
			Beam + NoiseBlock	.026
			DNN	.074
			NoiseBlock	.092
			Beam + DNN	-.279
		Beam	No Processing	.357
			Beam + NoiseBlock	.182
			DNN	.231
			NoiseBlock	.249
			Beam + DNN	-.123
		Beam + NoiseBlock	No Processing	.375
			Beam	.218
			DNN	.249
			NoiseBlock	.267
			Beam + DNN	-.105
		DNN	No Processing	.326
			Beam	.170
			Beam + NoiseBlock	.152
			NoiseBlock	.218
			Beam + DNN	-.153
		NoiseBlock	No Processing	.308
			Beam	.151
			Beam + NoiseBlock	.133
			DNN	.182
			Beam + DNN	-.172
		Beam + DNN	No Processing	.680
			Beam	.523
			Beam + NoiseBlock	.505
			DNN	.554
			NoiseBlock	.572
	90_degrees	No Processing	Beam	.242
			Beam + NoiseBlock	.161
			DNN	-.115
			NoiseBlock	.177
			Beam + DNN	-.148

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		Beam	No Processing	-.041	.068	1113
			Beam + NoiseBlock	-.080	.068	1113
			DNN	-.357*	.068	1113
			NoiseBlock	-.064	.068	1113
			Beam + DNN	-.389*	.068	1113
		Beam + NoiseBlock	No Processing	.039	.068	1113
			Beam	.080	.068	1113
			DNN	-.277*	.068	1113
			NoiseBlock	.016	.068	1113
			Beam + DNN	-.309*	.068	1113
		DNN	No Processing	.315*	.068	1113
			Beam	.357*	.068	1113
			Beam + NoiseBlock	.277*	.068	1113
			NoiseBlock	.292*	.068	1113
			Beam + DNN	-.033	.068	1113
		NoiseBlock	No Processing	.023	.068	1113
			Beam	.064	.068	1113
			Beam + NoiseBlock	-.016	.068	1113
			DNN	-.292*	.068	1113
			Beam + DNN	-.325*	.068	1113
		Beam + DNN	No Processing	.348*	.068	1113
			Beam	.389*	.068	1113
			Beam + NoiseBlock	.309*	.068	1113
			DNN	.033	.068	1113
			NoiseBlock	.325*	.068	1113
0	0_degrees	No Processing	Beam	-.337*	.068	1113
			Beam + NoiseBlock	-.332*	.068	1113
			DNN	-.164	.068	1113
			NoiseBlock	-.142	.068	1113
			Beam + DNN	-.680*	.068	1113
		Beam	No Processing	.337*	.068	1113
			Beam + NoiseBlock	.005	.068	1113
			DNN	.173	.068	1113
			NoiseBlock	.195	.068	1113
			Beam + DNN	-.343*	.068	1113

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		Beam	No Processing	1.000	-.242
			Beam + NoiseBlock	1.000	-.280
			DNN	<.001	-.557
			NoiseBlock	1.000	-.265
			Beam + DNN	<.001	-.589
		Beam + NoiseBlock	No Processing	1.000	-.161
			Beam	1.000	-.120
			DNN	<.001	-.477
			NoiseBlock	1.000	-.184
			Beam + DNN	<.001	-.509
		DNN	No Processing	<.001	.115
			Beam	<.001	.157
			Beam + NoiseBlock	<.001	.077
			NoiseBlock	<.001	.092
			Beam + DNN	1.000	-.233
		NoiseBlock	No Processing	1.000	-.177
			Beam	1.000	-.136
			Beam + NoiseBlock	1.000	-.216
			DNN	<.001	-.493
			Beam + DNN	<.001	-.525
		Beam + DNN	No Processing	<.001	.148
			Beam	<.001	.189
			Beam + NoiseBlock	<.001	.109
			DNN	1.000	-.168
			NoiseBlock	<.001	.125
0	0_degrees	No Processing	Beam	<.001	-.537
			Beam + NoiseBlock	<.001	-.533
			DNN	.240	-.364
			NoiseBlock	.553	-.342
			Beam + DNN	<.001	-.880
		Beam	No Processing	<.001	.137
			Beam + NoiseBlock	1.000	-.196
			DNN	.168	-.027
			NoiseBlock	.064	-.005
			Beam + DNN	<.001	-.543

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		Beam	No Processing	.159
			Beam + NoiseBlock	.120
			DNN	-.157
			NoiseBlock	.136
			Beam + DNN	-.189
		Beam + NoiseBlock	No Processing	.239
			Beam	.280
			DNN	-.077
			NoiseBlock	.216
			Beam + DNN	-.109
		DNN	No Processing	.516
			Beam	.557
			Beam + NoiseBlock	.477
			NoiseBlock	.493
			Beam + DNN	.168
		NoiseBlock	No Processing	.223
			Beam	.265
			Beam + NoiseBlock	.184
			DNN	-.092
			Beam + DNN	-.125
		Beam + DNN	No Processing	.548
			Beam	.589
			Beam + NoiseBlock	.509
			DNN	.233
			NoiseBlock	.525
0	0_degrees	No Processing	Beam	-.137
			Beam + NoiseBlock	-.132
			DNN	.036
			NoiseBlock	.058
			Beam + DNN	-.480
		Beam	No Processing	.537
			Beam + NoiseBlock	.205
			DNN	.373
			NoiseBlock	.395
			Beam + DNN	-.143

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		Beam + NoiseBlock	No Processing	.332*	.068	1113
			Beam	-.005	.068	1113
			DNN	.168	.068	1113
			NoiseBlock	.190	.068	1113
			Beam + DNN	-.347*	.068	1113
		DNN	No Processing	.164	.068	1113
			Beam	-.173	.068	1113
			Beam + NoiseBlock	-.168	.068	1113
			NoiseBlock	.022	.068	1113
			Beam + DNN	-.515*	.068	1113
		NoiseBlock	No Processing	.142	.068	1113
			Beam	-.195	.068	1113
			Beam + NoiseBlock	-.190	.068	1113
			DNN	-.022	.068	1113
			Beam + DNN	-.537*	.068	1113
		Beam + DNN	No Processing	.680*	.068	1113
			Beam	.343*	.068	1113
			Beam + NoiseBlock	.347*	.068	1113
			DNN	.515*	.068	1113
			NoiseBlock	.537*	.068	1113
	90_degrees	No Processing	Beam	.096	.068	1113
			Beam + NoiseBlock	-.031	.068	1113
			DNN	-.404*	.068	1113
			NoiseBlock	-.103	.068	1113
			Beam + DNN	-.514*	.068	1113
		Beam	No Processing	-.096	.068	1113
			Beam + NoiseBlock	-.127	.068	1113
			DNN	-.500*	.068	1113
			NoiseBlock	-.199	.068	1113
			Beam + DNN	-.610*	.068	1113
		Beam + NoiseBlock	No Processing	.031	.068	1113
			Beam	.127	.068	1113
			DNN	-.373*	.068	1113
			NoiseBlock	-.072	.068	1113
			Beam + DNN	-.483*	.068	1113

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		Beam + NoiseBlock	No Processing	<.001	.132
			Beam	1.000	-.205
			DNN	.203	-.032
			NoiseBlock	.079	-.010
			Beam + DNN	<.001	-.547
		DNN	No Processing	.240	-.036
			Beam	.168	-.373
			Beam + NoiseBlock	.203	-.368
			NoiseBlock	1.000	-.178
			Beam + DNN	<.001	-.716
		NoiseBlock	No Processing	.553	-.058
			Beam	.064	-.395
			Beam + NoiseBlock	.079	-.390
			DNN	1.000	-.222
			Beam + DNN	<.001	-.738
		Beam + DNN	No Processing	<.001	.480
			Beam	<.001	.143
			Beam + NoiseBlock	<.001	.147
			DNN	<.001	.315
			NoiseBlock	<.001	.337
	90_degrees	No Processing	Beam	1.000	-.104
			Beam + NoiseBlock	1.000	-.231
			DNN	<.001	-.604
			NoiseBlock	1.000	-.303
			Beam + DNN	<.001	-.714
		Beam	No Processing	1.000	-.296
			Beam + NoiseBlock	.940	-.327
			DNN	<.001	-.700
			NoiseBlock	.053	-.399
			Beam + DNN	<.001	-.810
		Beam + NoiseBlock	No Processing	1.000	-.169
			Beam	.940	-.073
			DNN	<.001	-.574
			NoiseBlock	1.000	-.272
			Beam + DNN	<.001	-.683

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		Beam + NoiseBlock	No Processing	.533
			Beam	.196
			DNN	.368
			NoiseBlock	.390
			Beam + DNN	-.147
		DNN	No Processing	.364
			Beam	.027
			Beam + NoiseBlock	.032
			NoiseBlock	.222
			Beam + DNN	-.315
		NoiseBlock	No Processing	.342
			Beam	.005
			Beam + NoiseBlock	.010
			DNN	.178
			Beam + DNN	-.337
		Beam + DNN	No Processing	.880
			Beam	.543
			Beam + NoiseBlock	.547
			DNN	.716
			NoiseBlock	.738
	90_degrees	No Processing	Beam	.296
			Beam + NoiseBlock	.169
			DNN	-.204
			NoiseBlock	.097
			Beam + DNN	-.314
		Beam	No Processing	.104
			Beam + NoiseBlock	.073
			DNN	-.300
			NoiseBlock	.001
			Beam + DNN	-.410
		Beam + NoiseBlock	No Processing	.231
			Beam	.327
			DNN	-.173
			NoiseBlock	.128
			Beam + DNN	-.283

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		DNN	No Processing	.404*	.068	1113
			Beam	.500*	.068	1113
			Beam + NoiseBlock	.373*	.068	1113
			NoiseBlock	.301*	.068	1113
			Beam + DNN	-.110	.068	1113
		NoiseBlock	No Processing	.103	.068	1113
			Beam	.199	.068	1113
			Beam + NoiseBlock	.072	.068	1113
			DNN	-.301*	.068	1113
			Beam + DNN	-.411*	.068	1113
		Beam + DNN	No Processing	.514*	.068	1113
			Beam	.610*	.068	1113
			Beam + NoiseBlock	.483*	.068	1113
			DNN	.110	.068	1113
			NoiseBlock	.411*	.068	1113
5	0_degrees	No Processing	Beam	-.554*	.068	1113
			Beam + NoiseBlock	-.524*	.068	1113
			DNN	-.352*	.068	1113
			NoiseBlock	-.302*	.068	1113
			Beam + DNN	-.896*	.068	1113.000
		Beam	No Processing	.554*	.068	1113
			Beam + NoiseBlock	.029	.068	1113
			DNN	.202*	.068	1113
			NoiseBlock	.251*	.068	1113
			Beam + DNN	-.342*	.068	1113.000
		Beam + NoiseBlock	No Processing	.524*	.068	1113
			Beam	-.029	.068	1113
			DNN	.173	.068	1113
			NoiseBlock	.222*	.068	1113
			Beam + DNN	-.371*	.068	1113.000
		DNN	No Processing	.352*	.068	1113
			Beam	-.202*	.068	1113
			Beam + NoiseBlock	-.173	.068	1113
			NoiseBlock	.049	.068	1113
			Beam + DNN	-.544*	.068	1113.000

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		DNN	No Processing	<.001	.204
			Beam	<.001	.300
			Beam + NoiseBlock	<.001	.173
			NoiseBlock	<.001	.101
			Beam + DNN	1.000	-.310
		NoiseBlock	No Processing	1.000	-.097
			Beam	.053	-.001
			Beam + NoiseBlock	1.000	-.128
			DNN	<.001	-.502
			Beam + DNN	<.001	-.611
		Beam + DNN	No Processing	<.001	.314
			Beam	<.001	.410
			Beam + NoiseBlock	<.001	.283
			DNN	1.000	-.090
			NoiseBlock	<.001	.211
5	0_degrees	No Processing	Beam	<.001	-.754
			Beam + NoiseBlock	<.001	-.725
			DNN	<.001	-.552
			NoiseBlock	<.001	-.503
			Beam + DNN	<.001	-1.096
		Beam	No Processing	<.001	.354
			Beam + NoiseBlock	1.000	-.171
			DNN	.046	.002
			NoiseBlock	.003	.051
			Beam + DNN	<.001	-.542
		Beam + NoiseBlock	No Processing	<.001	.324
			Beam	1.000	-.229
			DNN	.170	-.028
			NoiseBlock	.017	.022
			Beam + DNN	<.001	-.571
		DNN	No Processing	<.001	.152
			Beam	.046	-.402
			Beam + NoiseBlock	.170	-.373
			NoiseBlock	1.000	-.151
			Beam + DNN	<.001	-.744

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		DNN	No Processing	.604
			Beam	.700
			Beam + NoiseBlock	.574
			NoiseBlock	.502
			Beam + DNN	.090
		NoiseBlock	No Processing	.303
			Beam	.399
			Beam + NoiseBlock	.272
			DNN	-.101
			Beam + DNN	-.211
		Beam + DNN	No Processing	.714
			Beam	.810
			Beam + NoiseBlock	.683
			DNN	.310
			NoiseBlock	.611
5	0_degrees	No Processing	Beam	-.354
			Beam + NoiseBlock	-.324
			DNN	-.152
			NoiseBlock	-.102
			Beam + DNN	-.695
		Beam	No Processing	.754
			Beam + NoiseBlock	.229
			DNN	.402
			NoiseBlock	.451
			Beam + DNN	-.142
		Beam + NoiseBlock	No Processing	.725
			Beam	.171
			DNN	.373
			NoiseBlock	.422
			Beam + DNN	-.171
		DNN	No Processing	.552
			Beam	-.002
			Beam + NoiseBlock	.028
			NoiseBlock	.250
			Beam + DNN	-.344

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		NoiseBlock	No Processing	.302*	.068	1113
			Beam	-.251*	.068	1113
			Beam + NoiseBlock	-.222*	.068	1113
			DNN	-.049	.068	1113
			Beam + DNN	-.593*	.068	1113.000
		Beam + DNN	No Processing	.896*	.068	1113.000
			Beam	.342*	.068	1113.000
			Beam + NoiseBlock	.371*	.068	1113.000
			DNN	.544*	.068	1113.000
			NoiseBlock	.593*	.068	1113.000
	90_degrees	No Processing	Beam	.193	.068	1113
			Beam + NoiseBlock	.046	.068	1113
			DNN	-.394*	.068	1113
			NoiseBlock	-.071	.068	1113
			Beam + DNN	-.470*	.068	1113.000
		Beam	No Processing	-.193	.068	1113
			Beam + NoiseBlock	-.147	.068	1113
			DNN	-.587*	.068	1113
			NoiseBlock	-.264*	.068	1113
			Beam + DNN	-.663*	.068	1113.000
		Beam + NoiseBlock	No Processing	-.046	.068	1113
			Beam	.147	.068	1113
			DNN	-.440*	.068	1113
			NoiseBlock	-.117	.068	1113
			Beam + DNN	-.516*	.068	1113.000
		DNN	No Processing	.394*	.068	1113
			Beam	.587*	.068	1113
			Beam + NoiseBlock	.440*	.068	1113
			NoiseBlock	.323*	.068	1113
			Beam + DNN	-.076	.068	1113.000
		NoiseBlock	No Processing	.071	.068	1113
			Beam	.264*	.068	1113
			Beam + NoiseBlock	.117	.068	1113
			DNN	-.323*	.068	1113
			Beam + DNN	-.399*	.068	1113.000

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		NoiseBlock	No Processing	<.001	.102
			Beam	.003	-.451
			Beam + NoiseBlock	.017	-.422
			DNN	1.000	-.250
			Beam + DNN	<.001	-.793
		Beam + DNN	No Processing	<.001	.695
			Beam	<.001	.142
			Beam + NoiseBlock	<.001	.171
			DNN	<.001	.344
			NoiseBlock	<.001	.393
	90_degrees	No Processing	Beam	.069	-.007
			Beam + NoiseBlock	1.000	-.154
			DNN	<.001	-.594
			NoiseBlock	1.000	-.271
			Beam + DNN	<.001	-.670
		Beam	No Processing	.069	-.393
			Beam + NoiseBlock	.460	-.347
			DNN	<.001	-.787
			NoiseBlock	.002	-.464
			Beam + DNN	<.001	-.863
		Beam + NoiseBlock	No Processing	1.000	-.246
			Beam	.460	-.053
			DNN	<.001	-.640
			NoiseBlock	1.000	-.317
			Beam + DNN	<.001	-.716
		DNN	No Processing	<.001	.194
			Beam	<.001	.387
			Beam + NoiseBlock	<.001	.240
			NoiseBlock	<.001	.123
			Beam + DNN	1.000	-.276
		NoiseBlock	No Processing	1.000	-.129
			Beam	.002	.064
			Beam + NoiseBlock	1.000	-.083
			DNN	<.001	-.523
			Beam + DNN	<.001	-.599

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		NoiseBlock	No Processing	.503
			Beam	-.051
			Beam + NoiseBlock	-.022
			DNN	.151
			Beam + DNN	-.393
		Beam + DNN	No Processing	1.096
			Beam	.542
			Beam + NoiseBlock	.571
			DNN	.744
			NoiseBlock	.793
	90_degrees	No Processing	Beam	.393
			Beam + NoiseBlock	.246
			DNN	-.194
			NoiseBlock	.129
			Beam + DNN	-.270
		Beam	No Processing	.007
			Beam + NoiseBlock	.053
			DNN	-.387
			NoiseBlock	-.064
			Beam + DNN	-.463
		Beam + NoiseBlock	No Processing	.154
			Beam	.347
			DNN	-.240
			NoiseBlock	.083
			Beam + DNN	-.316
		DNN	No Processing	.594
			Beam	.787
			Beam + NoiseBlock	.640
			NoiseBlock	.523
			Beam + DNN	.124
		NoiseBlock	No Processing	.271
			Beam	.464
			Beam + NoiseBlock	.317
			DNN	-.123
			Beam + DNN	-.199

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		Beam + DNN	No Processing	.470*	.068	1113.000
			Beam	.663*	.068	1113.000
			Beam + NoiseBlock	.516*	.068	1113.000
			DNN	.076	.068	1113.000
			NoiseBlock	.399*	.068	1113.000

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		Beam + DNN	No Processing	<.001	.270
			Beam	<.001	.463
			Beam + NoiseBlock	<.001	.316
			DNN	1.000	-.124
			NoiseBlock	<.001	.199

Pairwise Comparisons[a]

SNR	Azimuth	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		Beam + DNN	No Processing	.670
			Beam	.863
			Beam + NoiseBlock	.716
			DNN	.276
			NoiseBlock	.599

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: pMOS.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

SNR	Azimuth	Numerator df	Denominator df	F	Sig.
-5	0_degrees	5	1113	11.289	<.001
	90_degrees	5	1113	12.654	<.001
0	0_degrees	5	1113	23.890	<.001
	90_degrees	5	1113	25.593	<.001
5	0_degrees	5	1113.000	38.706	<.001
	90_degrees	5	1113	29.354	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: pMOS.