APPENDIX A
LOAD-DEFLECTION TEST DATA

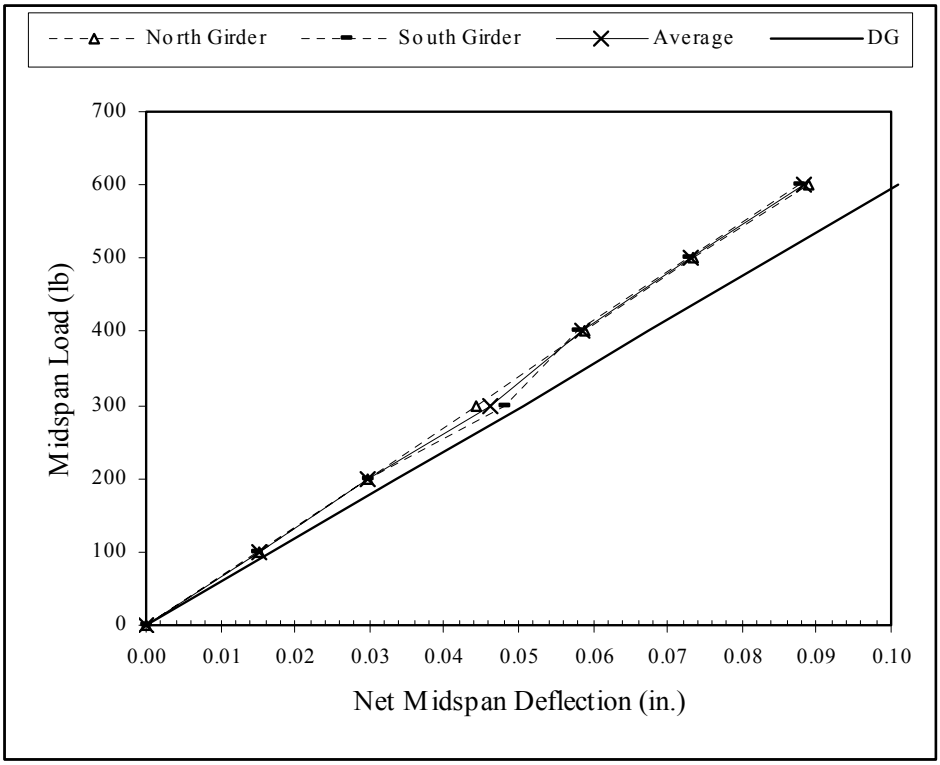

Figure A. 1—K-30 Bare Girder Load-Deflection Test

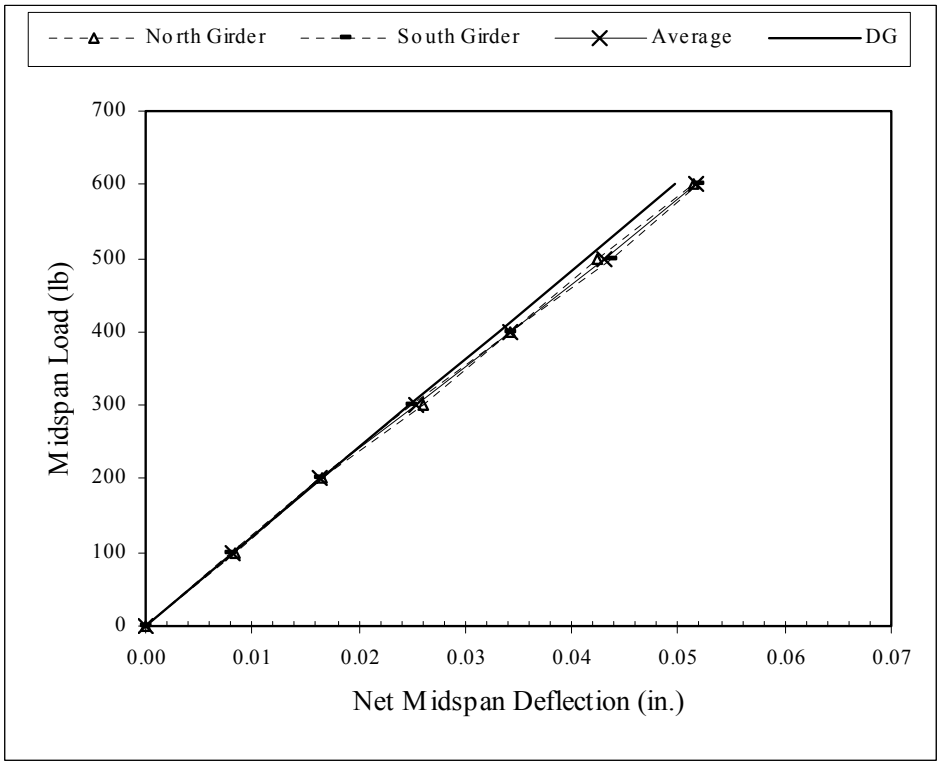

Figure A. 2—K-30-B Load-Deflection Test

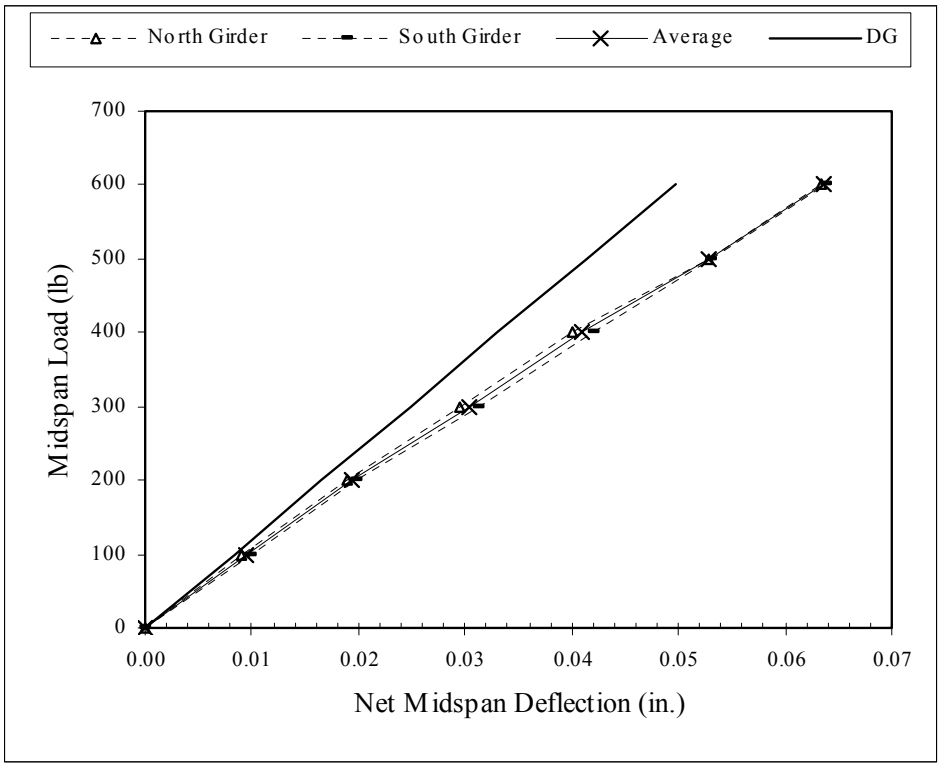

Figure A. 3—K-30-W Load-Deflection Test

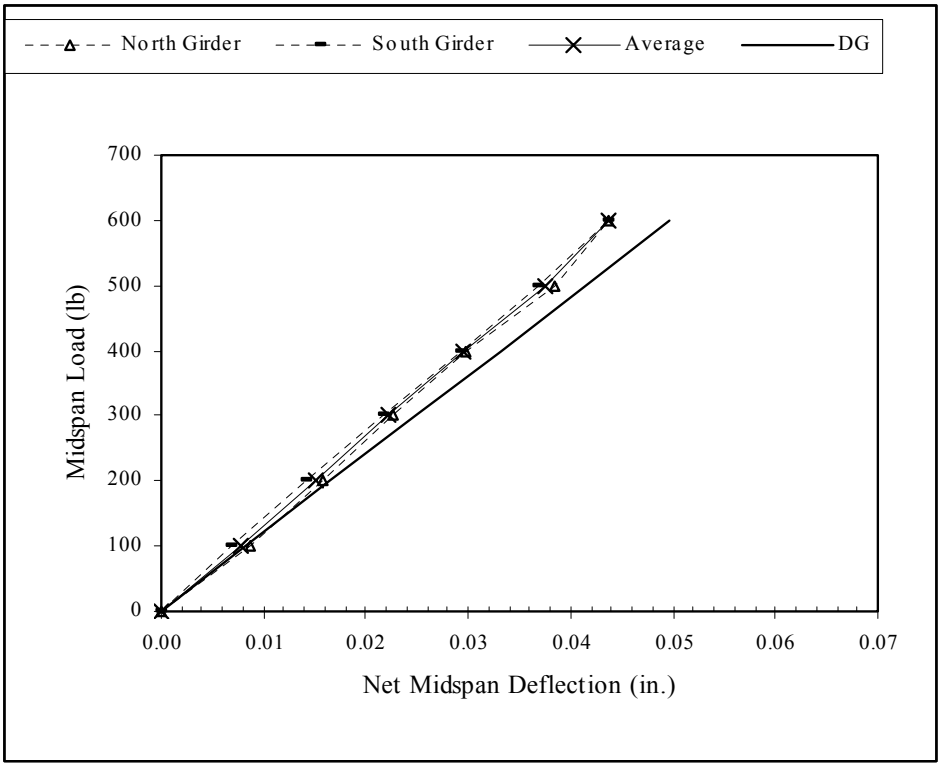

Figure A. 4—K-30-R Load-Deflection Test

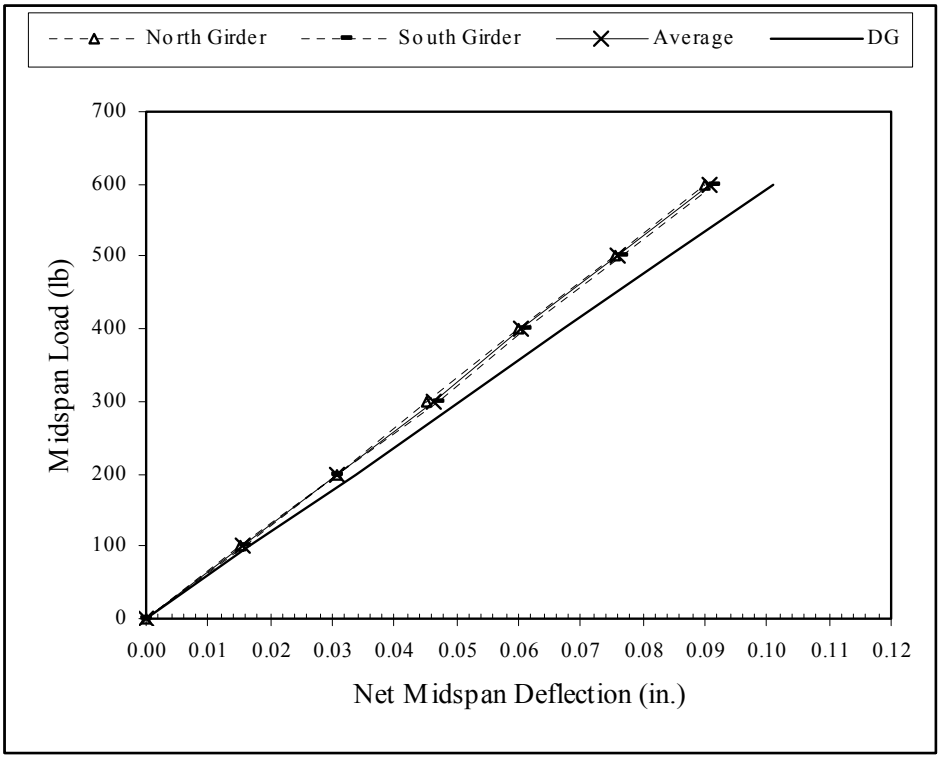

Figure A. 5—K-60 Bare Girder Load-Deflection Test

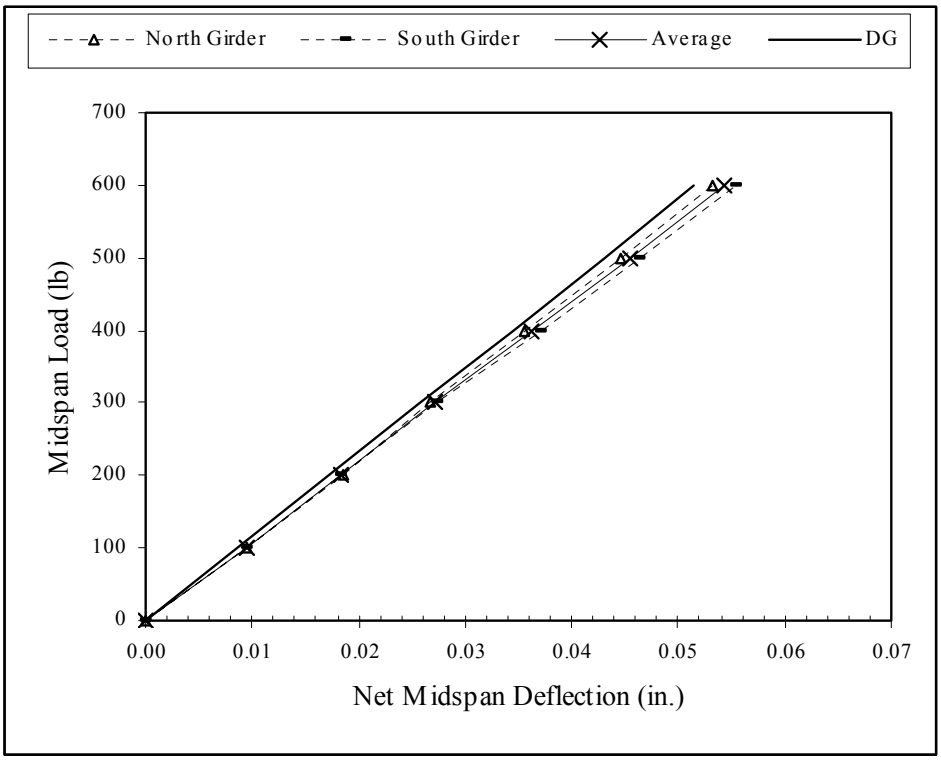

Figure A. 6—K-60-B Load-Deflection Test

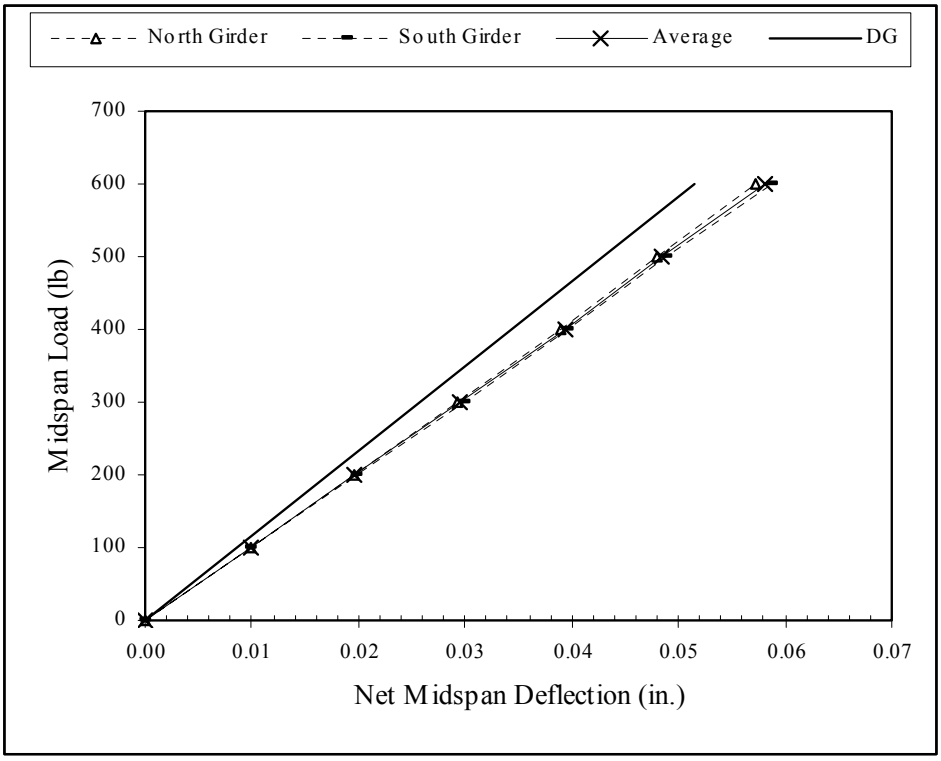

Figure A. 7—K-60-W Load-Deflection Test

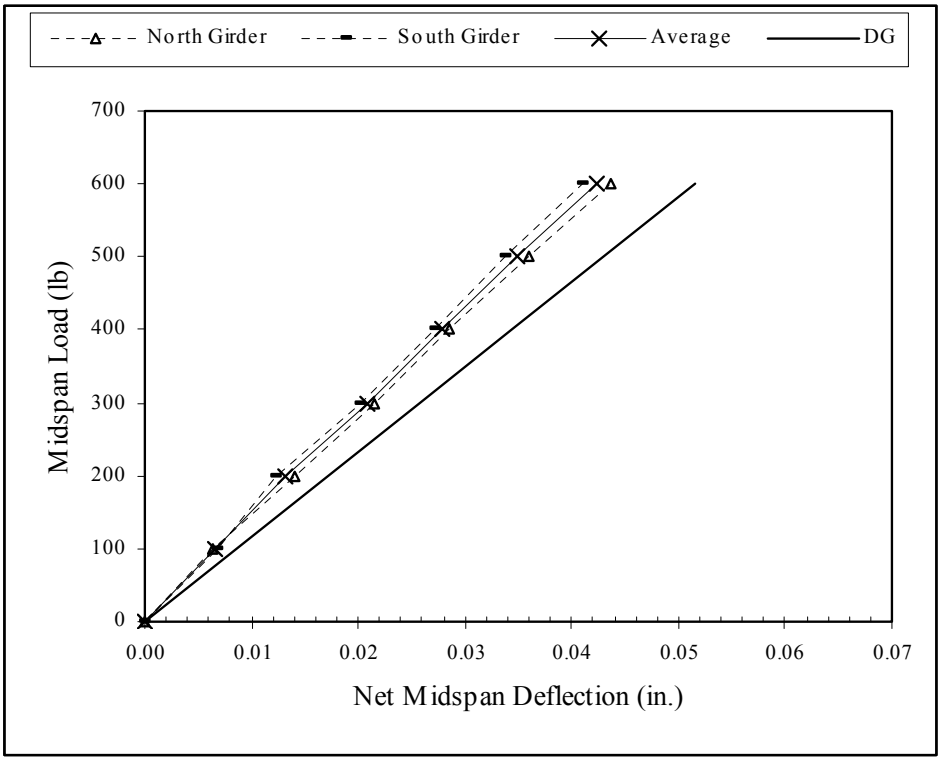

Figure A. 8—K-60-R Load-Deflection Test

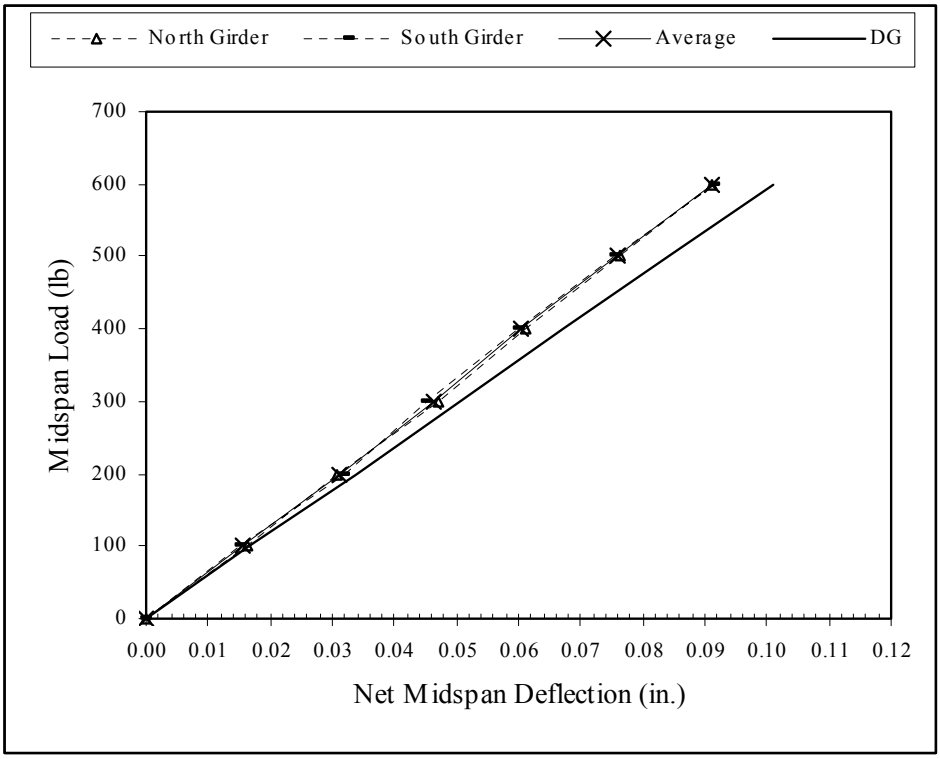

Figure A. 9—LH-60 Bare Girder Load-Deflection Test

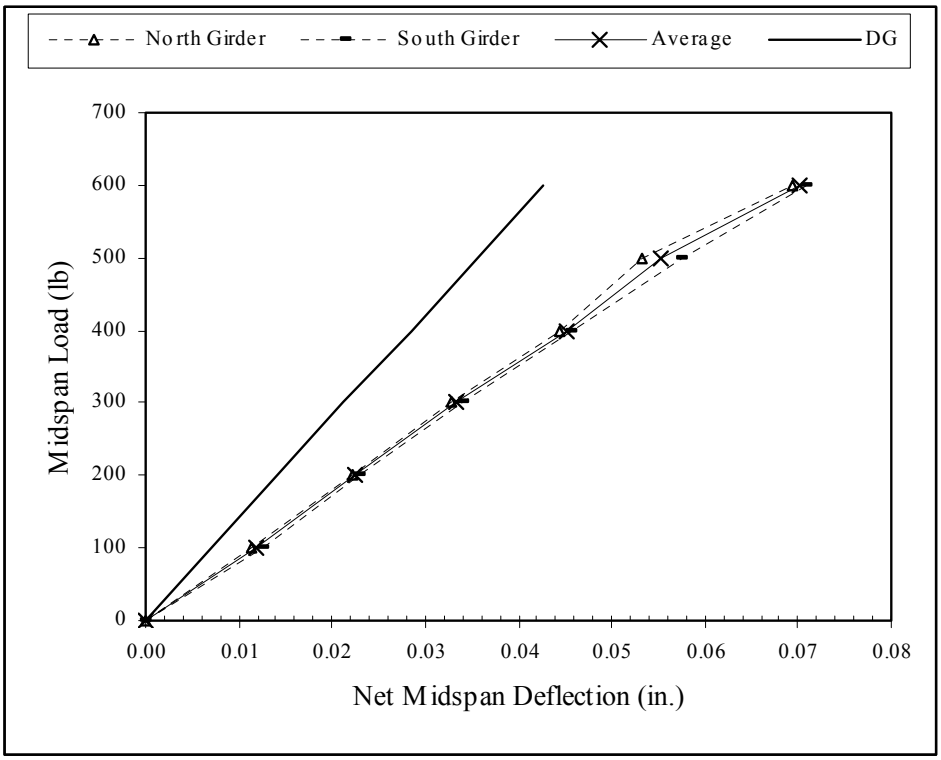

Figure A. 10—LH-60-B Load-Deflection Test

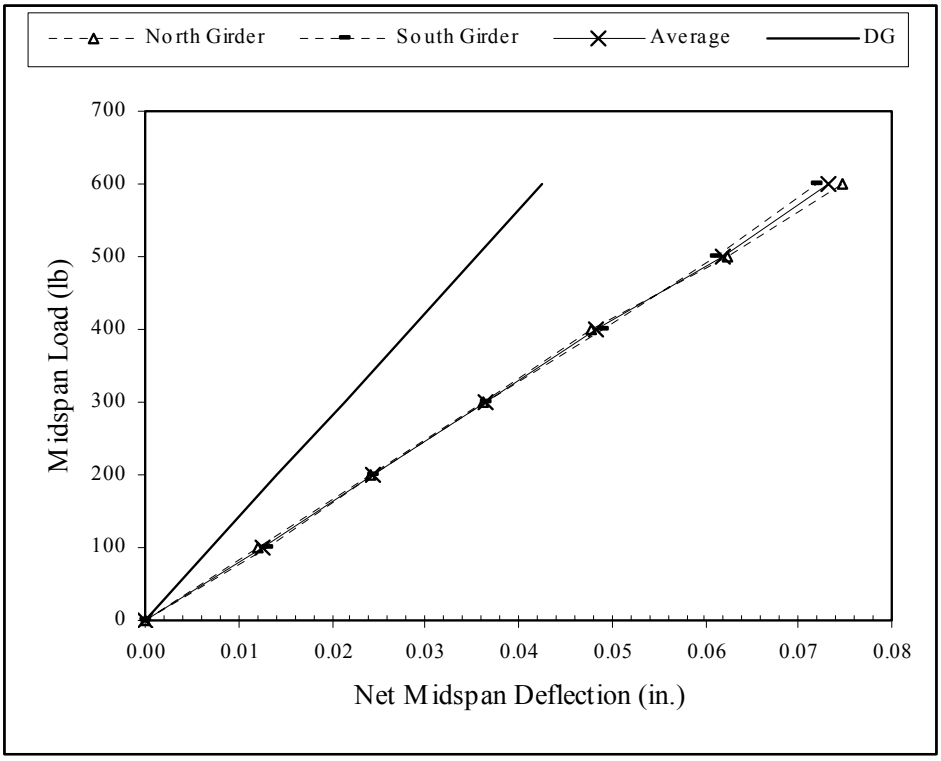

Figure A. 11—LH-60-W Load-Deflection Test

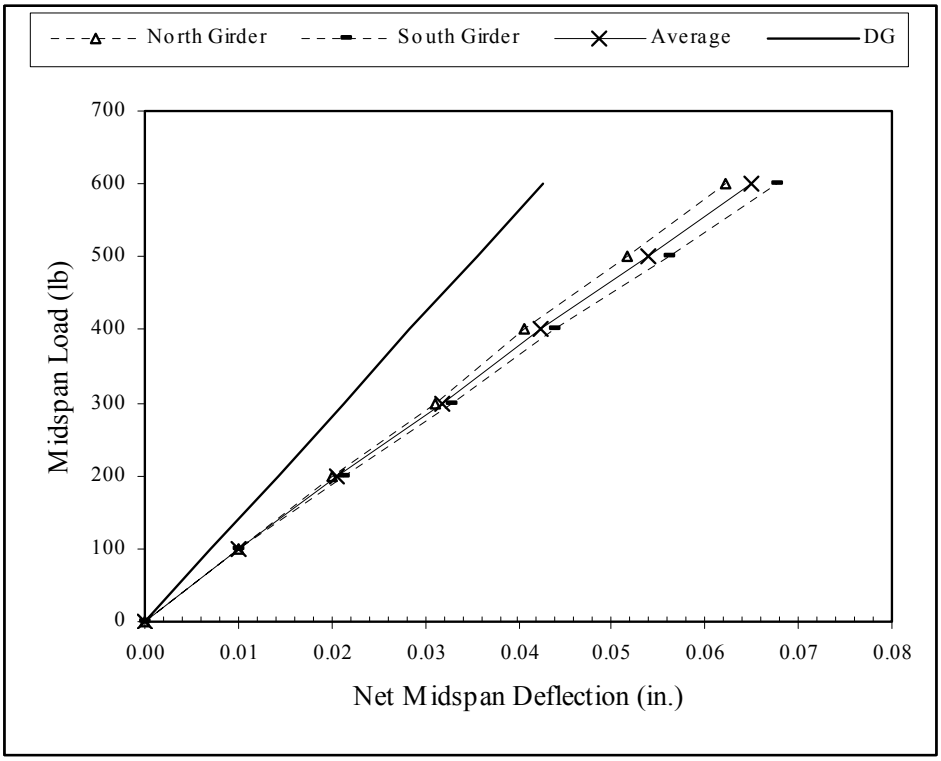

Figure A. 12—LH-60-R Load-Deflection Test

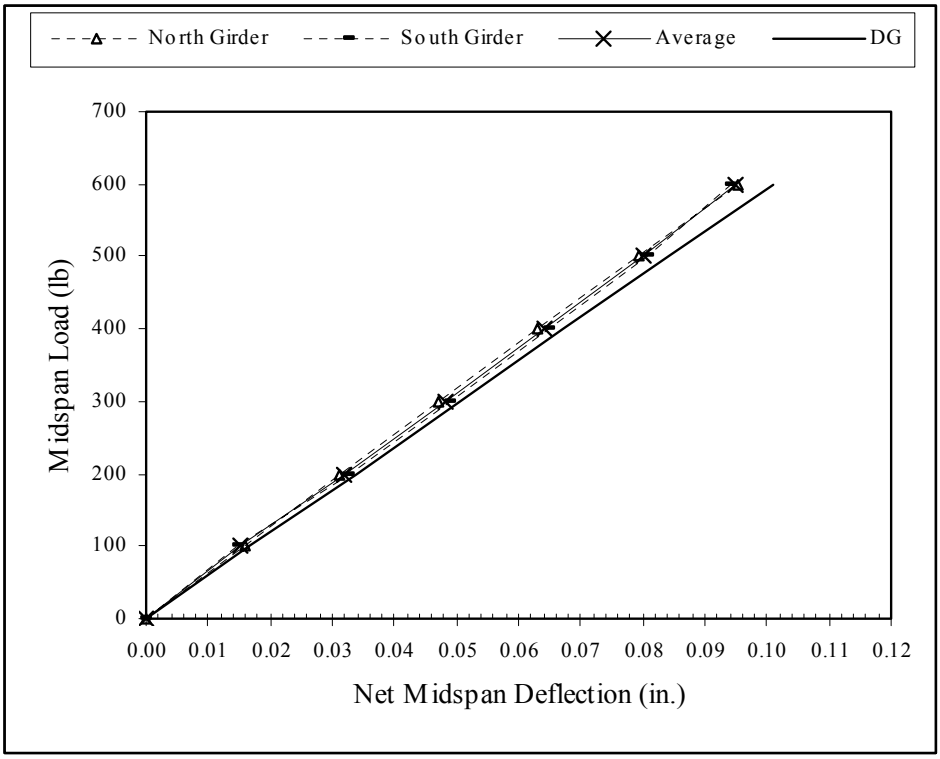

Figure A. 13—LH-90 Bare Girder Load-Deflection Test

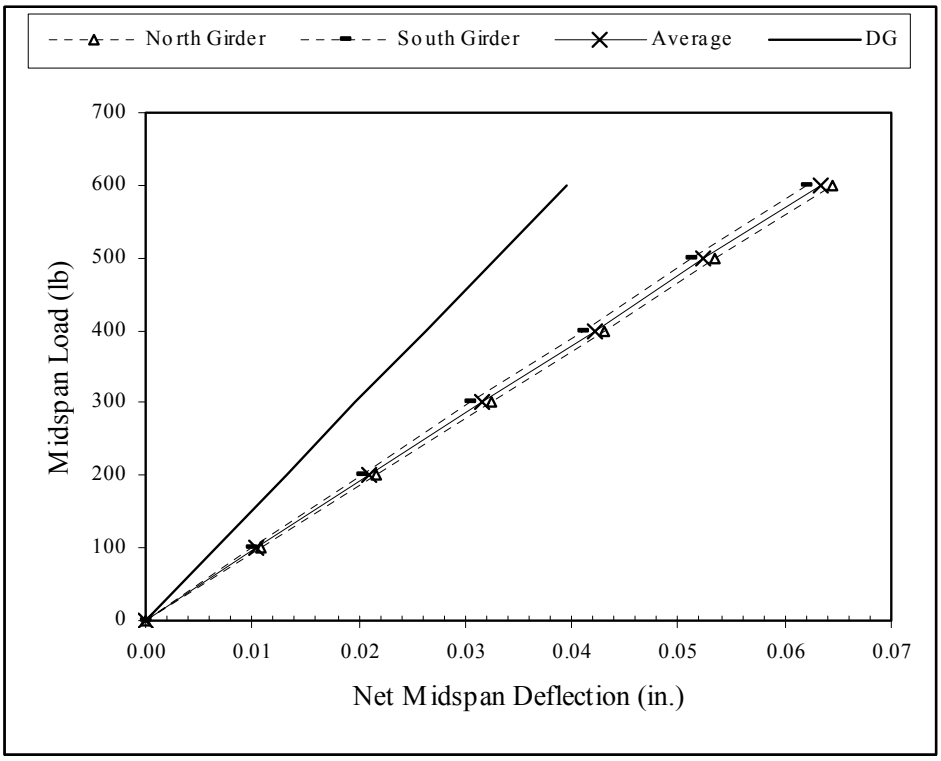

Figure A. 14—LH-90-B Load-Deflection Test

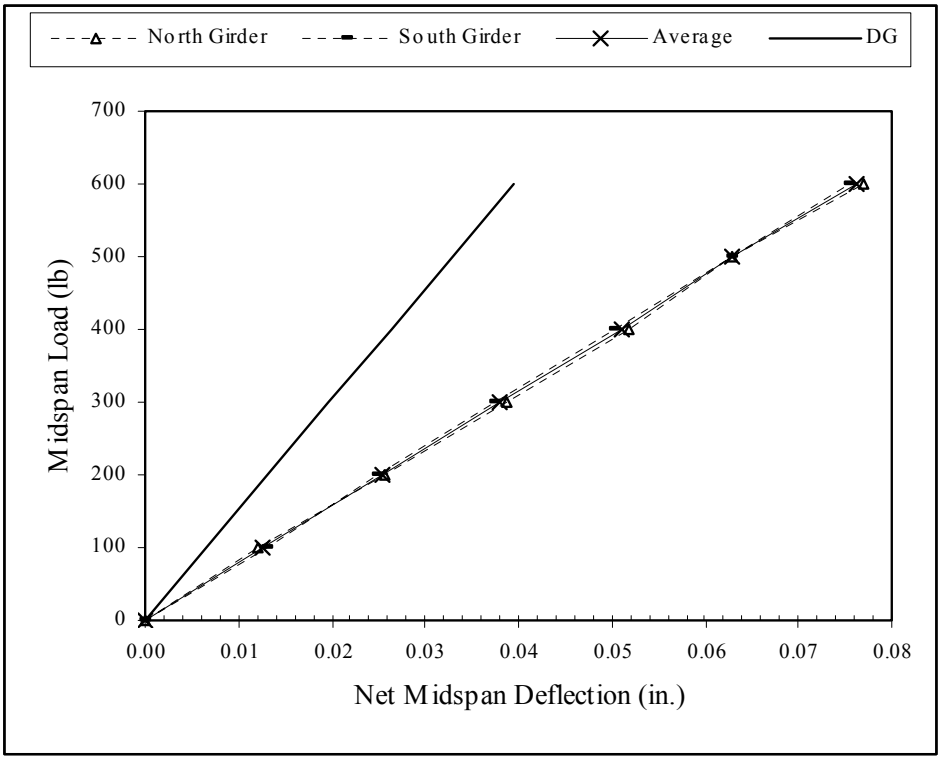

Figure A. 15—LH-90-W Load-Deflection Test

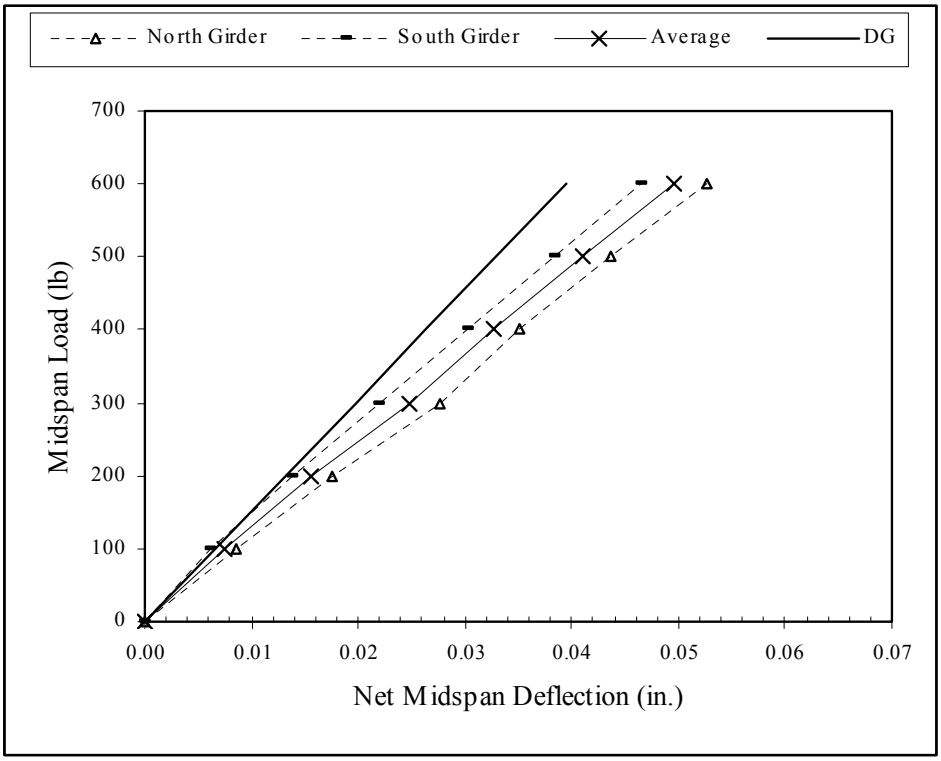

Figure A. 16—LH-90-R Load-Deflection Test

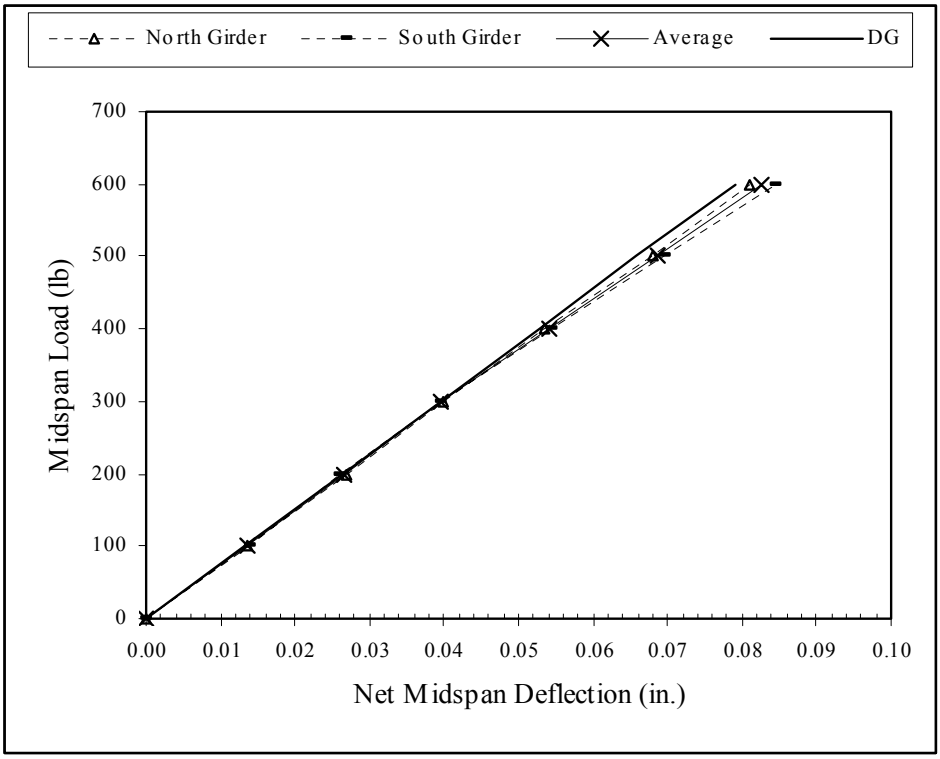

Figure A. 17—JG-K-30 Bare Girder Load-Deflection Test

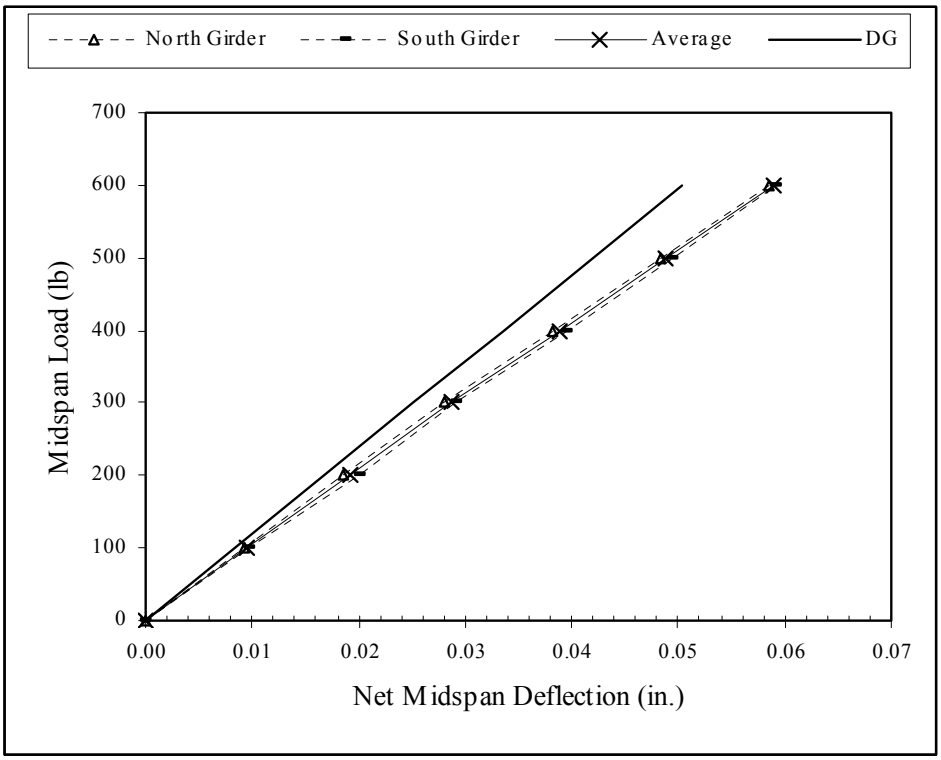

Figure A. 18—JG-K-30-B Load-Deflection Test

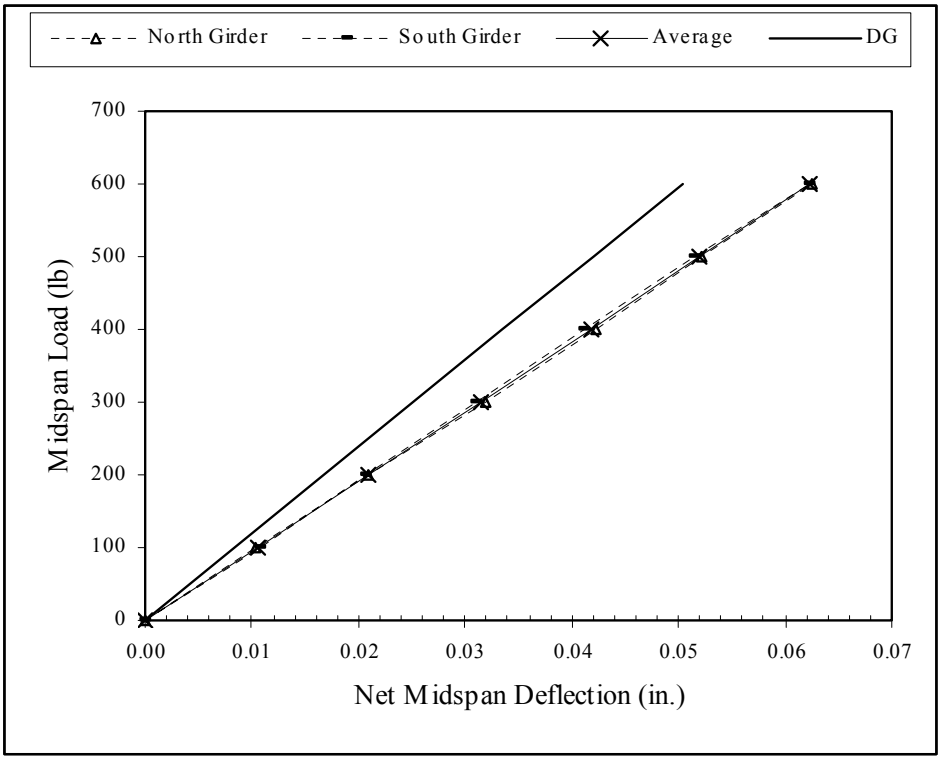

Figure A. 19—JG-K-30-W Load-Deflection Test

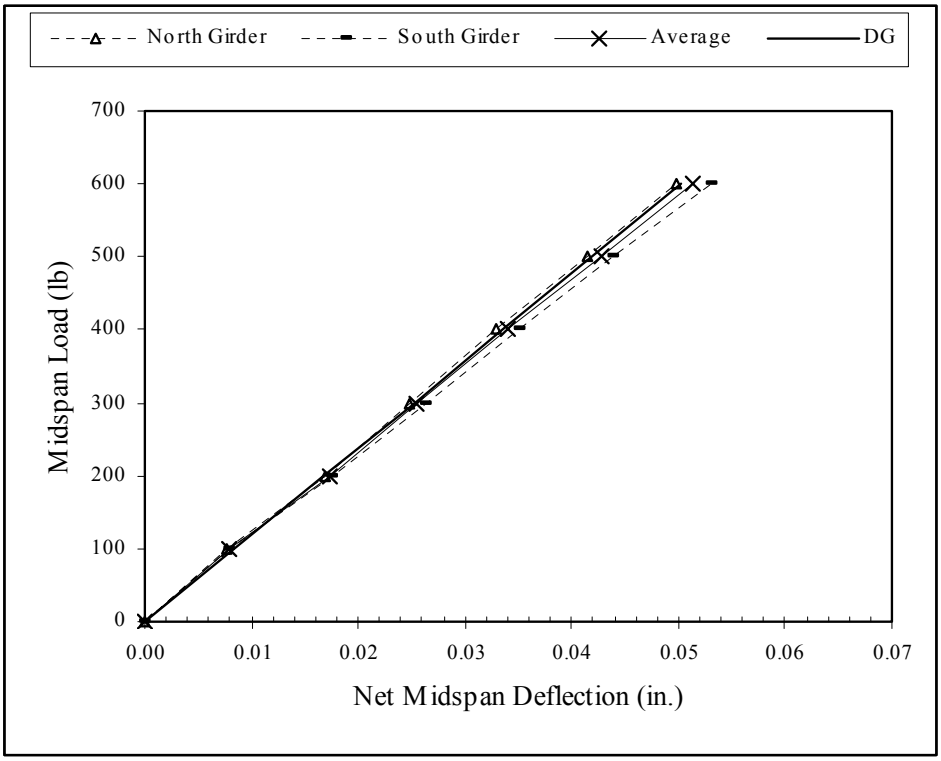

Figure A. 20—JG-K-30-R Load-Deflection Test

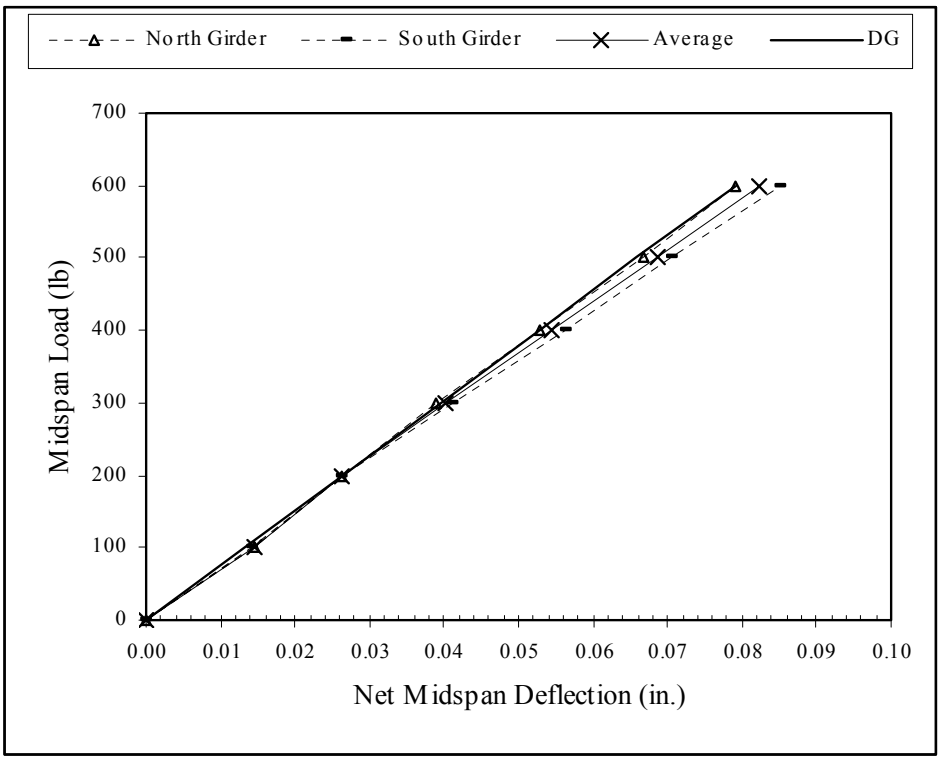

Figure A. 21—JG-LH-60 Bare Girder Load-Deflection Test

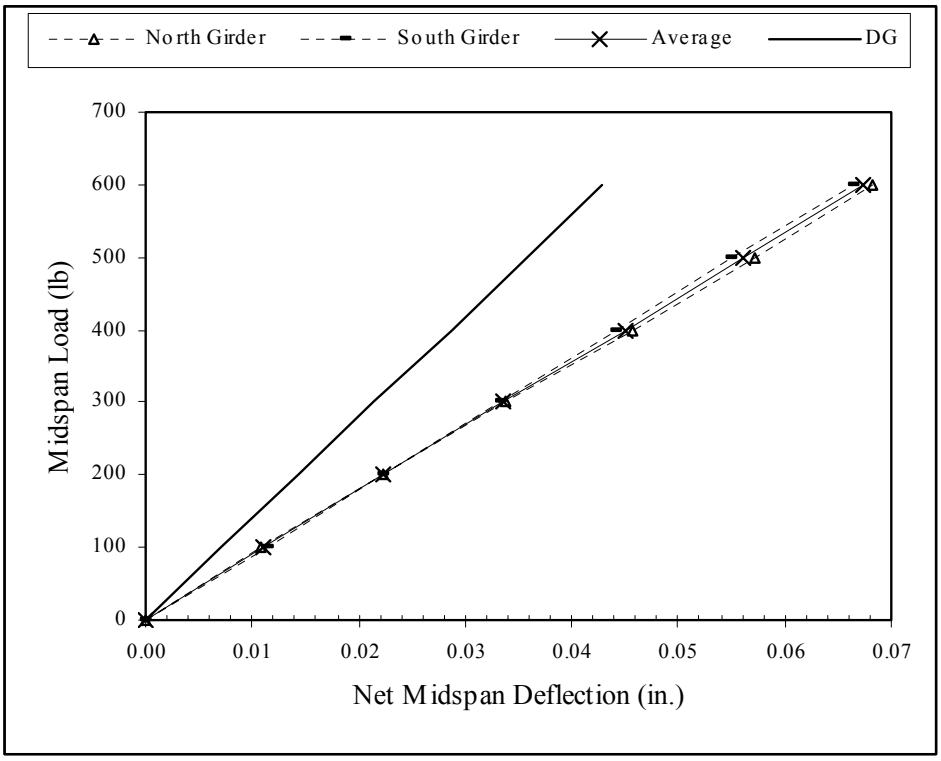

Figure A. 22— JG-LH-60-B Load-Deflection Test

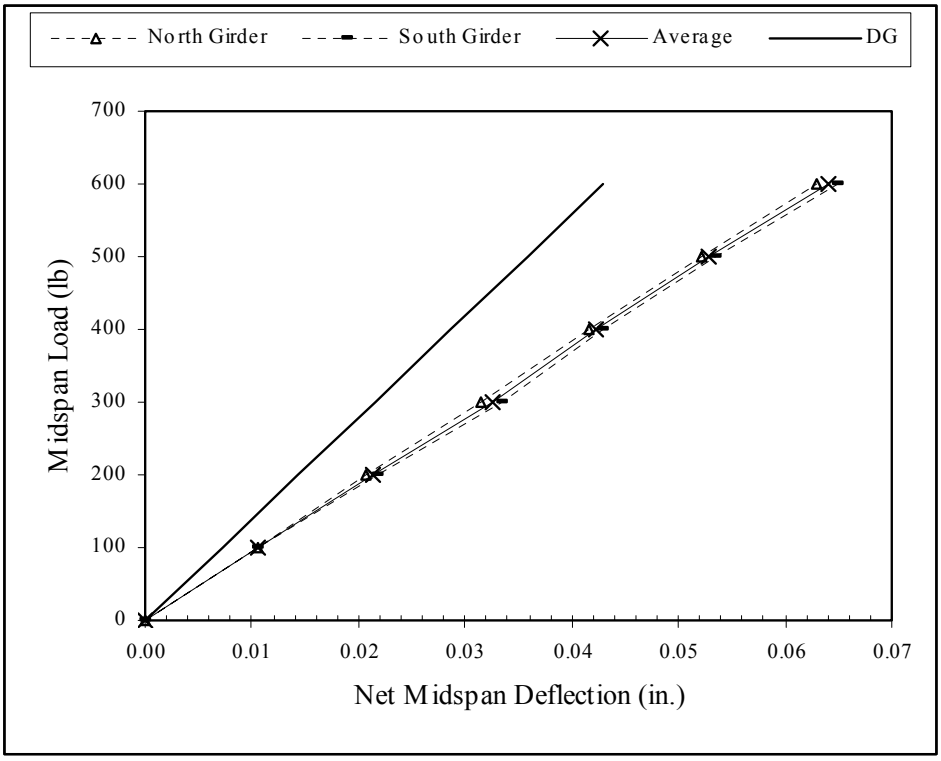

Figure A. 23— JG-LH-60-W Load-Deflection Test

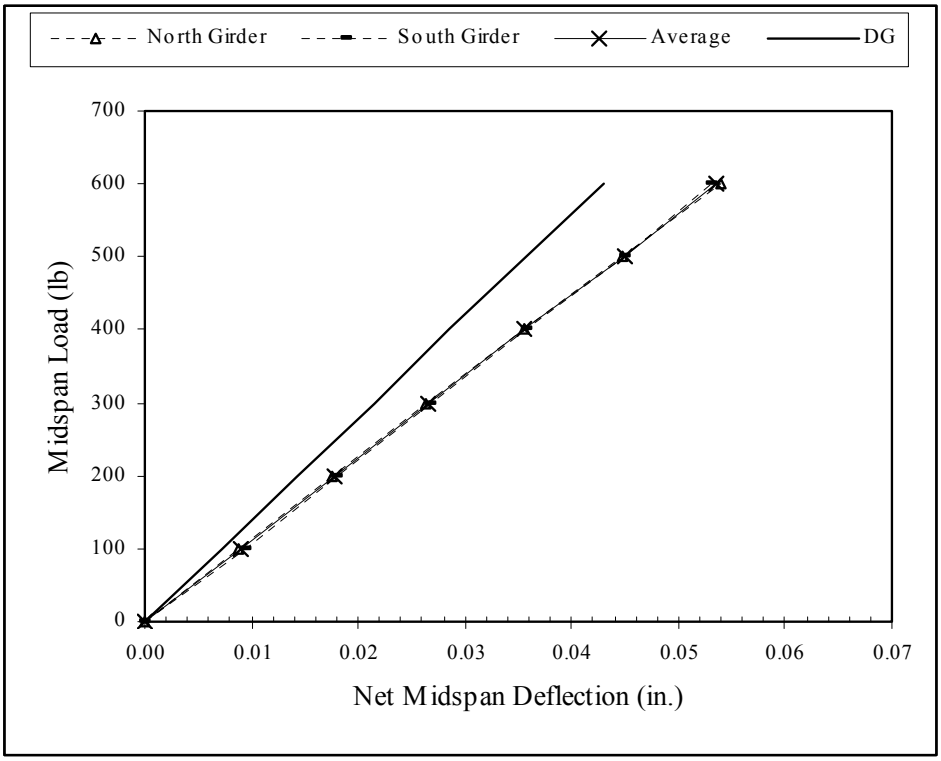

Figure A. 24— JG-LH-60-R Load-Deflection Test

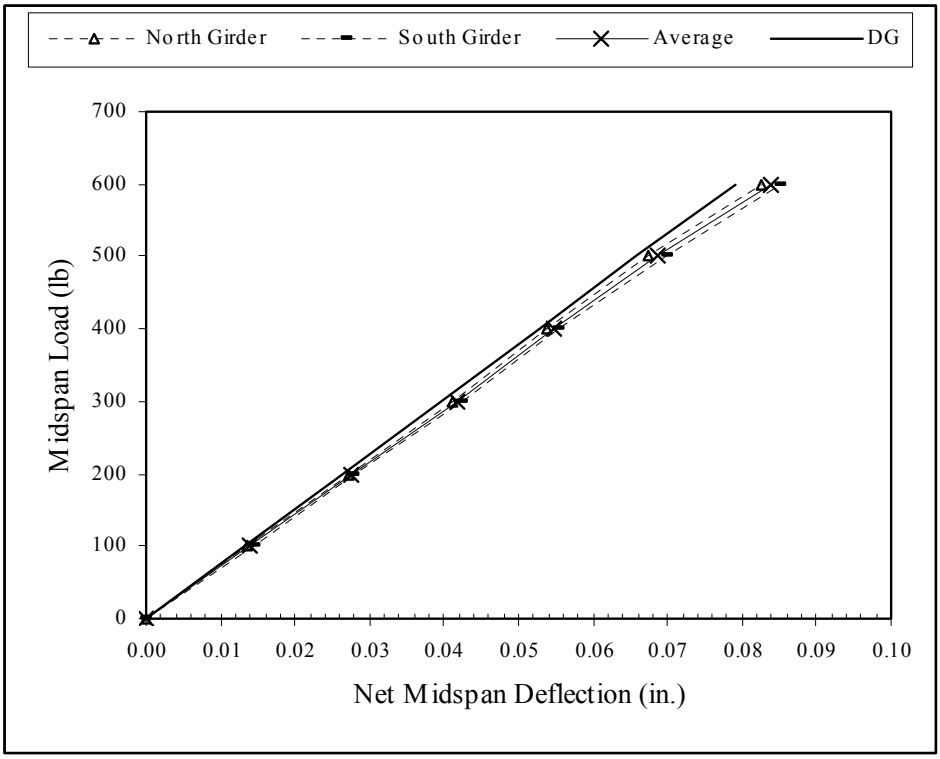

Figure A. 25— JG-LH-90 Bare Girder Load-Deflection Test

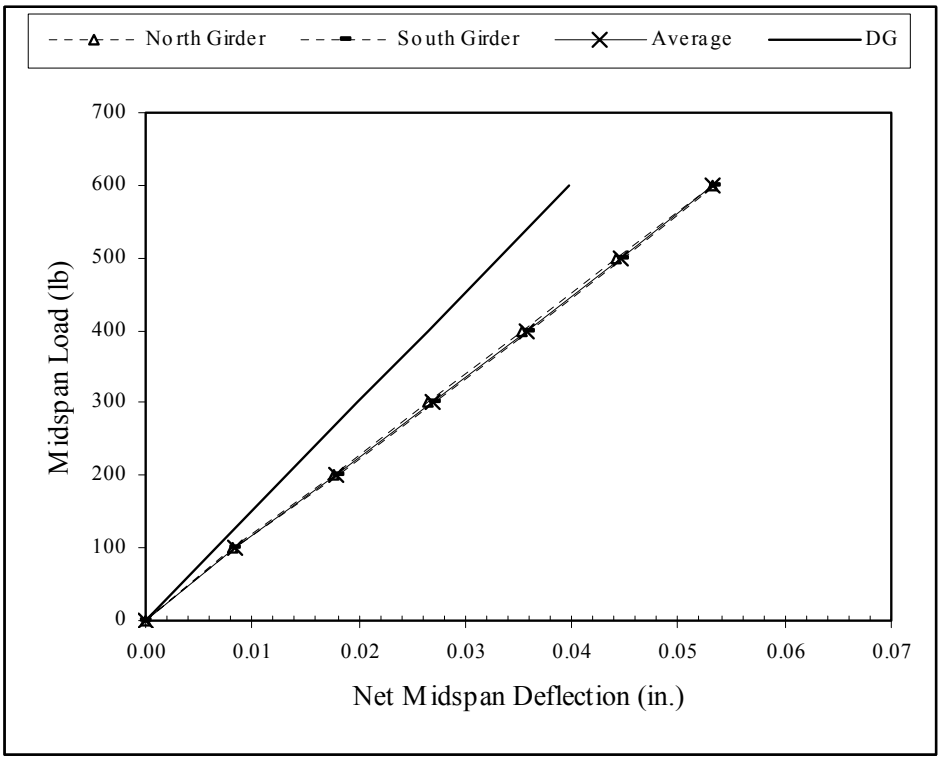

Figure A. 26— JG-LH-90-B Load-Deflection Test

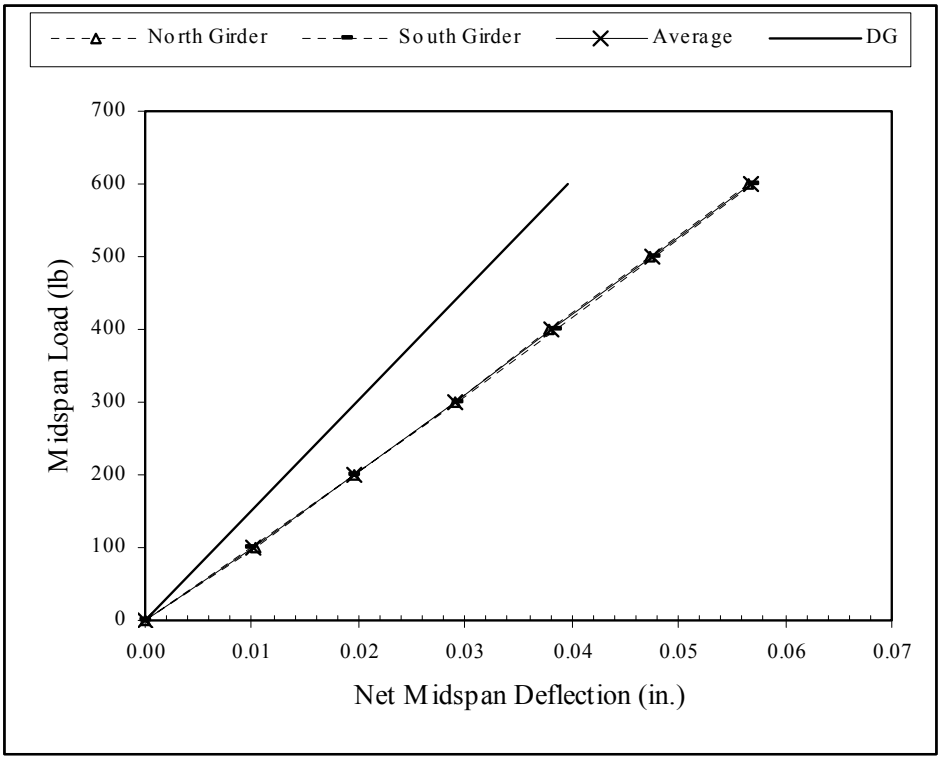

Figure A. 27— JG-LH-90-W Load-Deflection Test

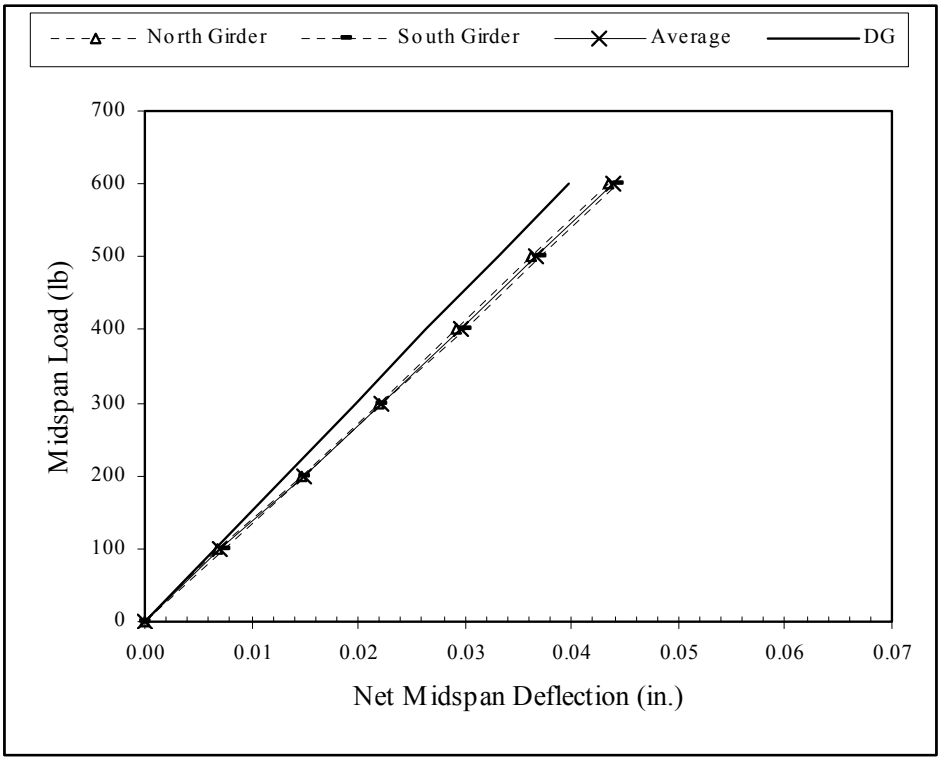

Figure A. 28— JG-LH-90-R Load-Deflection Test

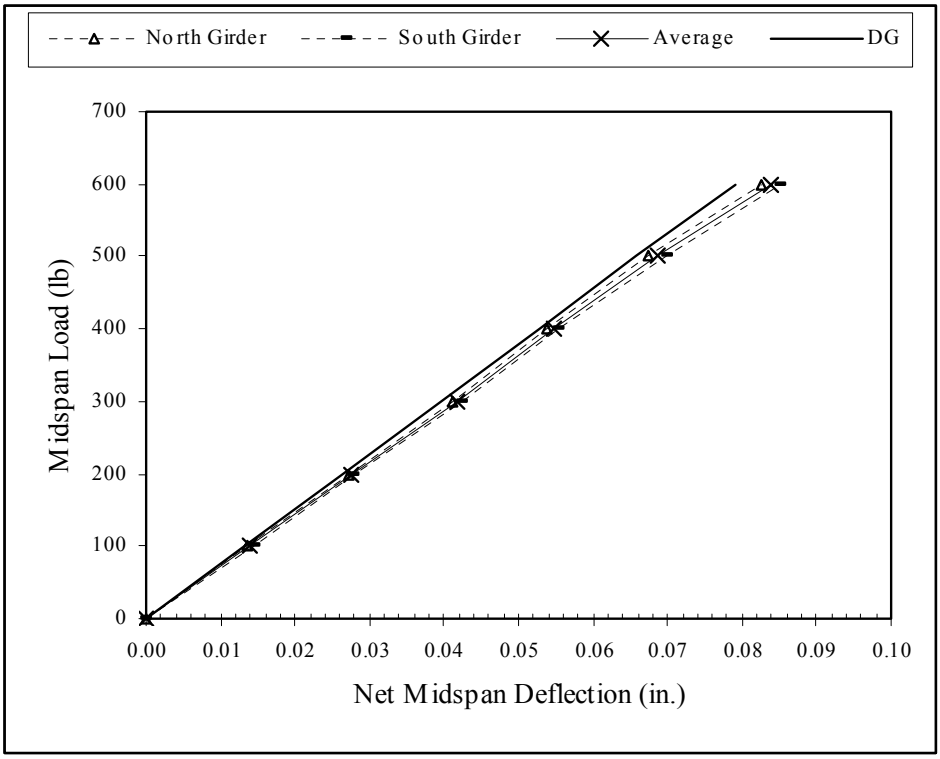

Figure A. 29— JG-LH-90-T Bare Girder Load-Deflection Test

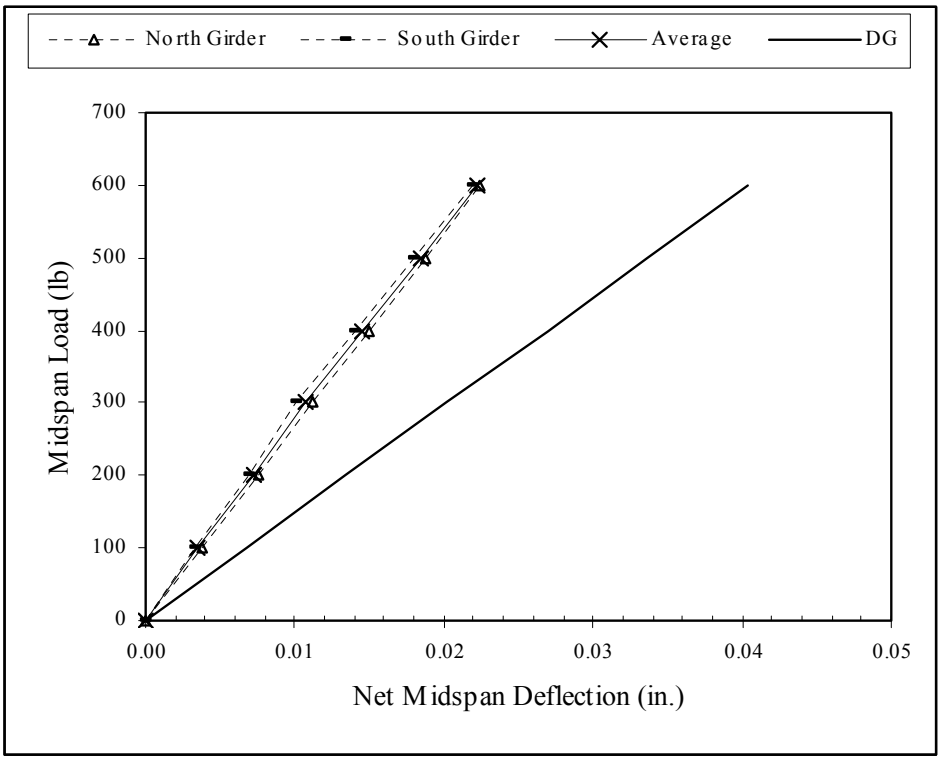

Figure A. 30— JG-LH-90-T Load-Deflection Test

Table A. 1—Test Deflections from 15 psf Distributed Load

Test Identification	Midspan Deflection (in.)			
	South Girder	North Gider	Average	Design Guide
K-30-BL	0.0930	0.0915	0.0923	0.0931
K-30-WL	0.1080	0.1020	0.1050	0.0931
K-30-RL	0.0770	0.0745	0.0758	0.0931
K-60-WL	0.1003	0.1150	0.1076	0.0966
LH-60-WL	0.1355	0.1380	0.1368	0.0799
LH-60-RL	0.1175	0.1173	0.1174	0.0799
LH-90-BL	0.1255	0.1185	0.1220	0.0741
LH-90-WL	0.1305	0.1468	0.1386	0.0741
JG-K-30-BL	0.1060	0.1080	0.1070	0.0944
JG-K-30-WL	0.1145	0.1118	0.1131	0.0944
JG-K-30-RL	0.0870	0.0888	0.0879	0.0944
JG-LH-60-BL	0.1200	0.1175	0.1188	0.0805
JG-LH-60-WL	0.1120	0.1170	0.1145	0.0805
JG-LH-60-RL	0.0940	0.0925	0.0933	0.0805
JG-LH-90-BL	0.0993	0.0945	0.0969	0.0743
JG-LH-90-WL	0.1048	0.1063	0.1055	0.0743
JG-LH-90-RL	0.0825	0.0815	0.0820	0.0743
JG-LH-90-TL	0.0405	0.0390	0.0398	0.0757

Joist Seat Load-Deflection Tests. The load deflection plots for each of the three seat stiffness are shown, followed by the regression plots used to obtain experimental seat moment of inertia. Table A.2 indicates the data regression ranges that were determined as the average seat shear from applying a 600 lb midspan load to the FE-models.

Table A. 2—Loads from FEM for Regression of Seat Test Data

Footbridge	Joist Type	Lower Bound (lb)	Upper Bound (lb)
K-30	8K1	0	250
K-60	8K1	0	450
LH-60	18LH550	0	300
LH-90	18LH800	0	200
JG-K-30	8K1	0	250
JG-LH-60	18LH550	0	300
JG-LH-90	18LH800	0	200

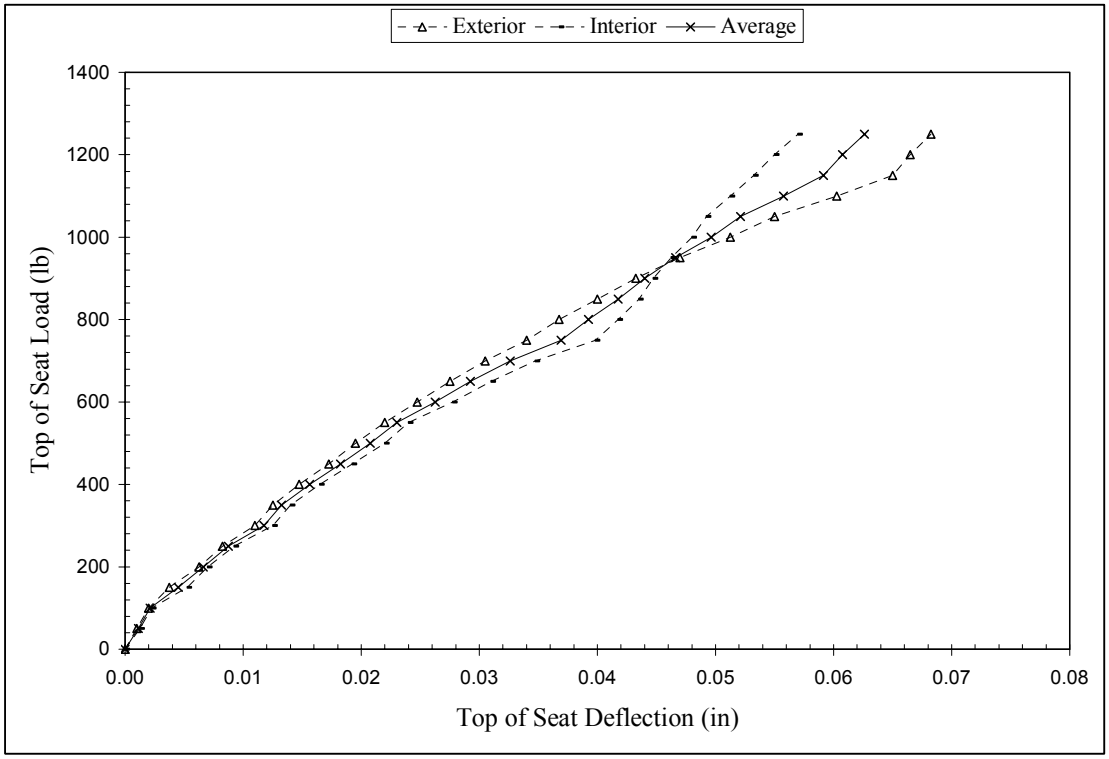

Figure A. 31—8K1 Joist Seat Load-Deflection Test (Attached to K-30)

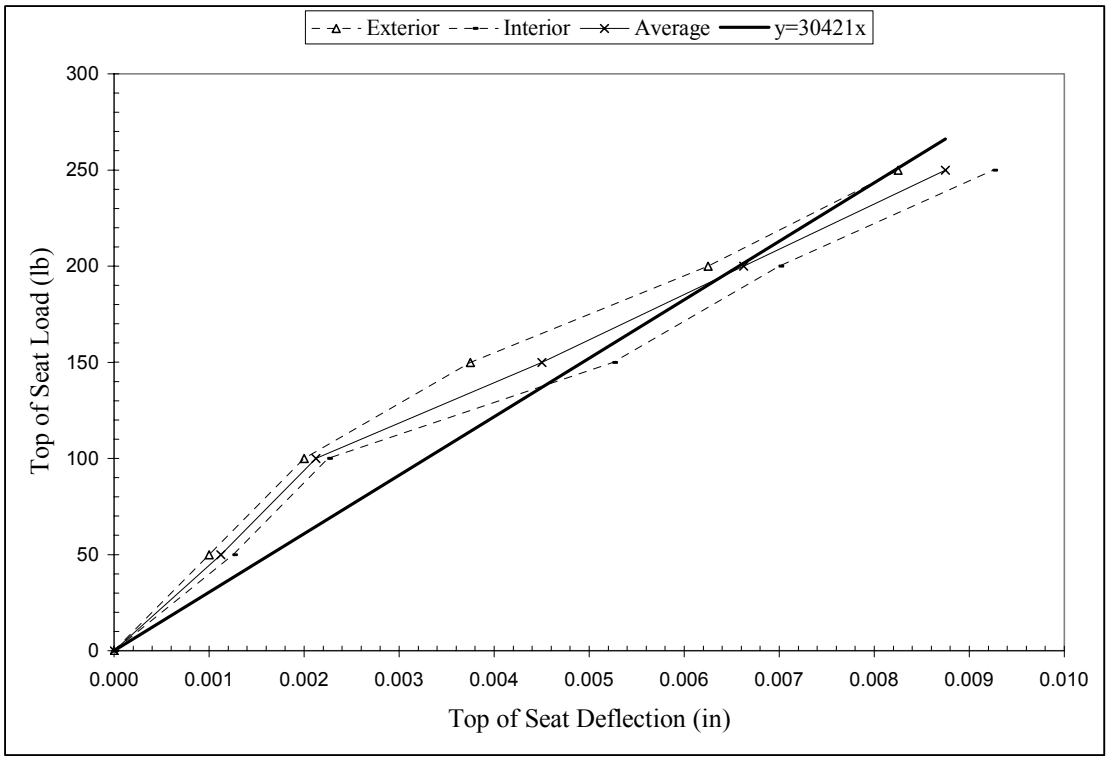

Figure A. 32—8K1 Regression 0-250lb

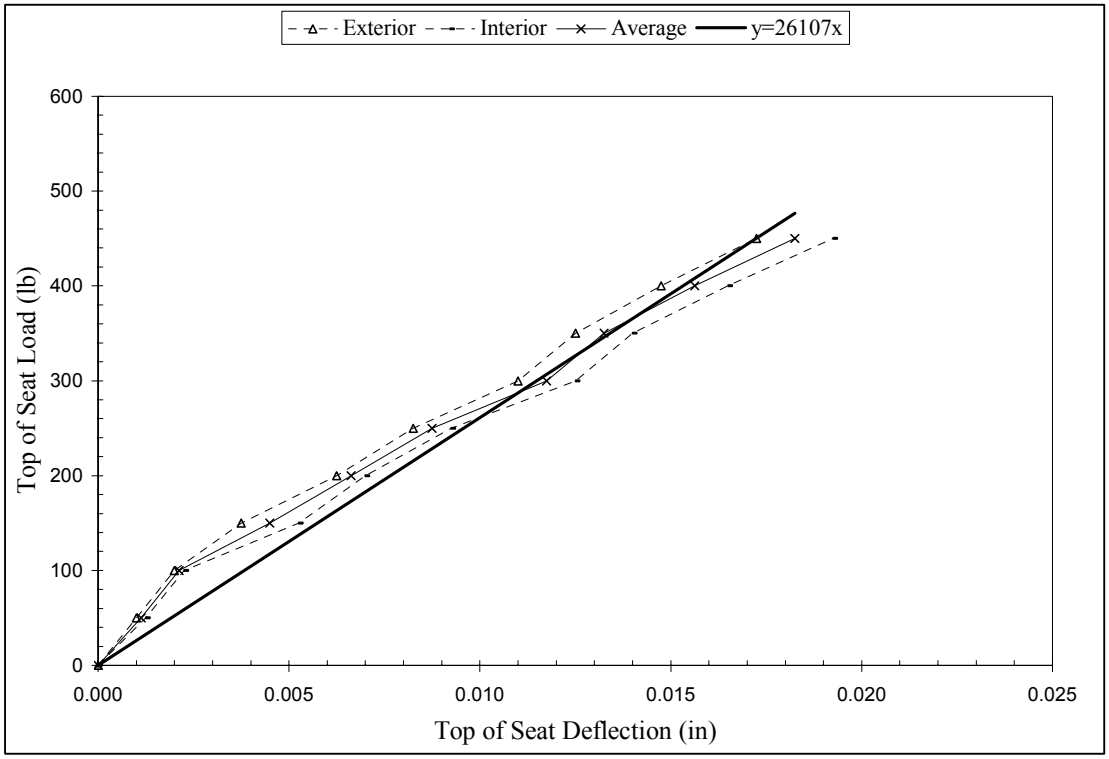

Figure A. 33—8K1 Regression 0-450 lb

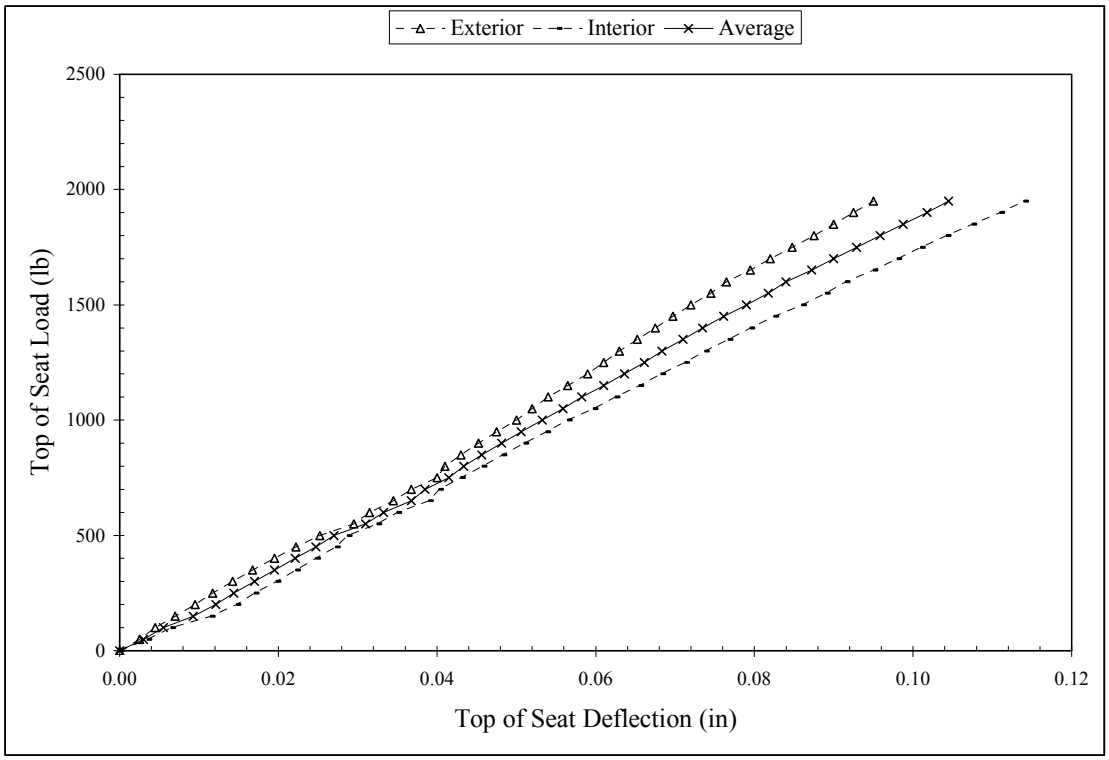

Figure A. 34—18LH550 Joist Seat Load Deflection Test (Attached to JG-LH-60-B)

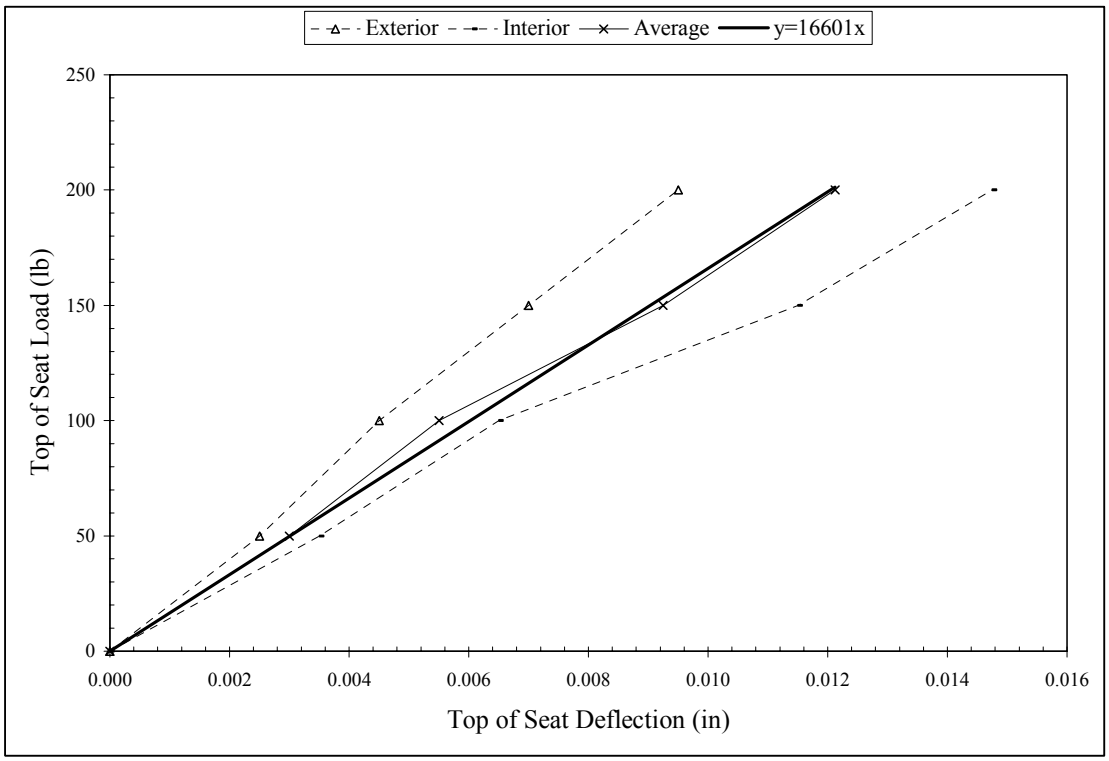

Figure A. 35—18LH550 Regression 0-200lb

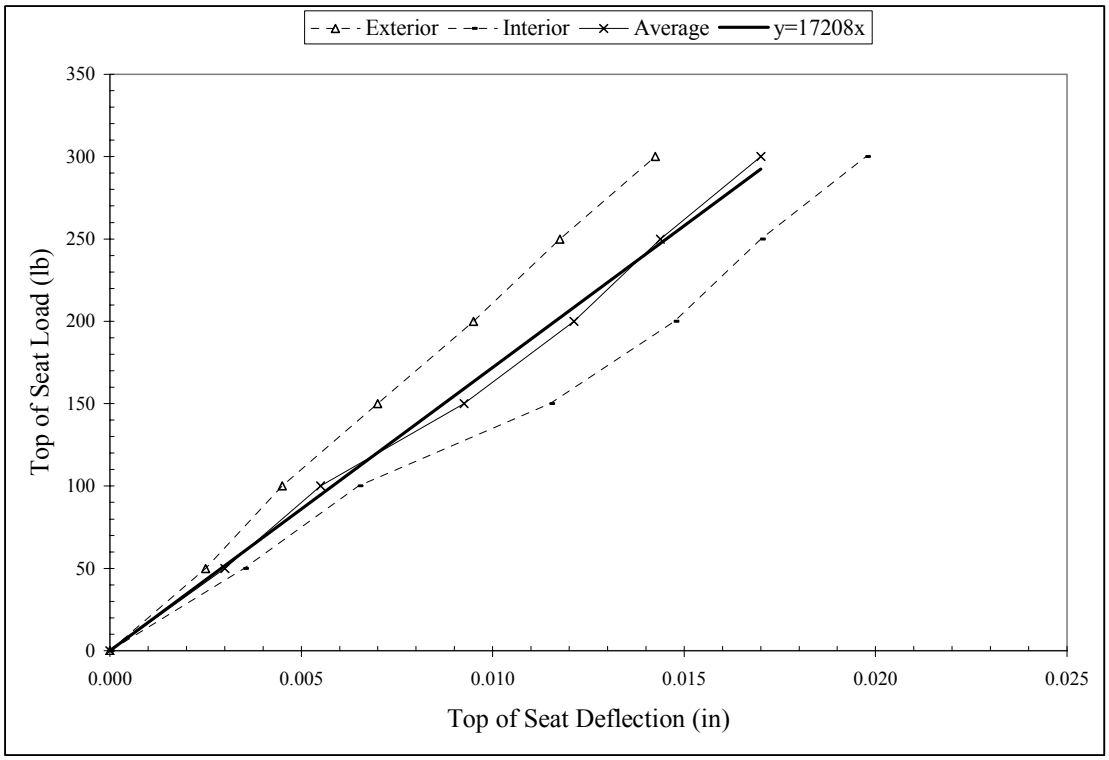

Figure A. 36—18LH550 Regression 0-300lb

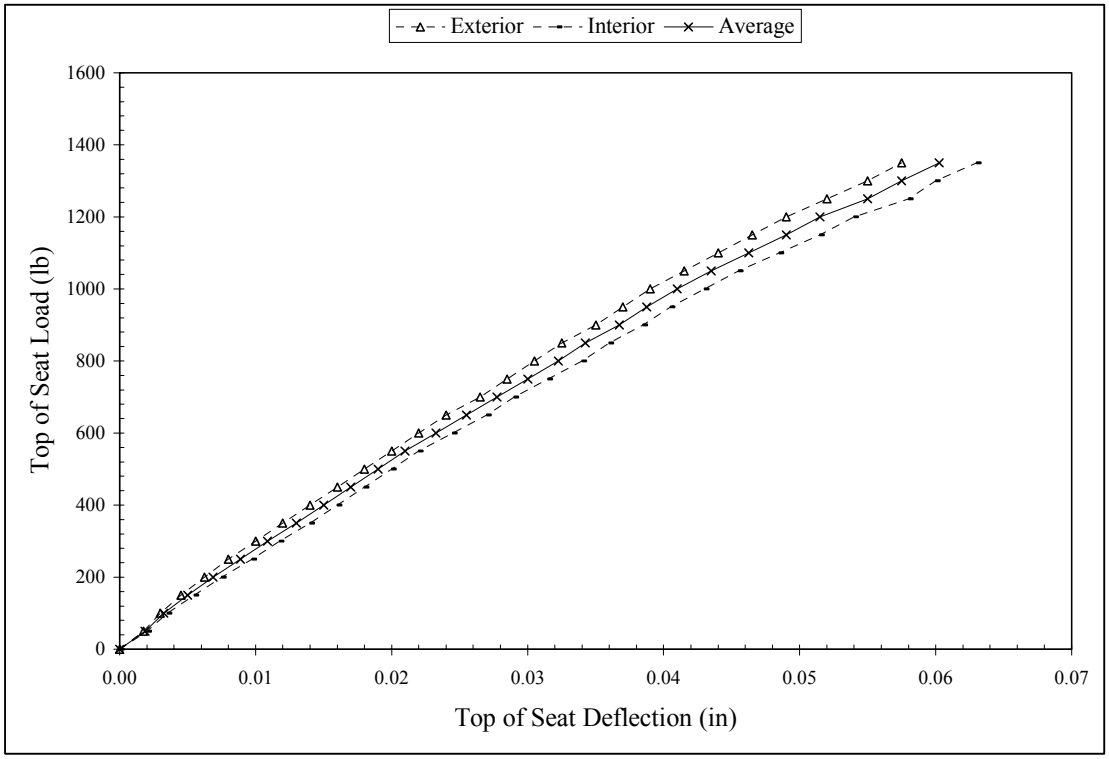

Figure A. 37—18LH800 Joist Seat Load Deflection Test(Attached to JG-LH-90-B)

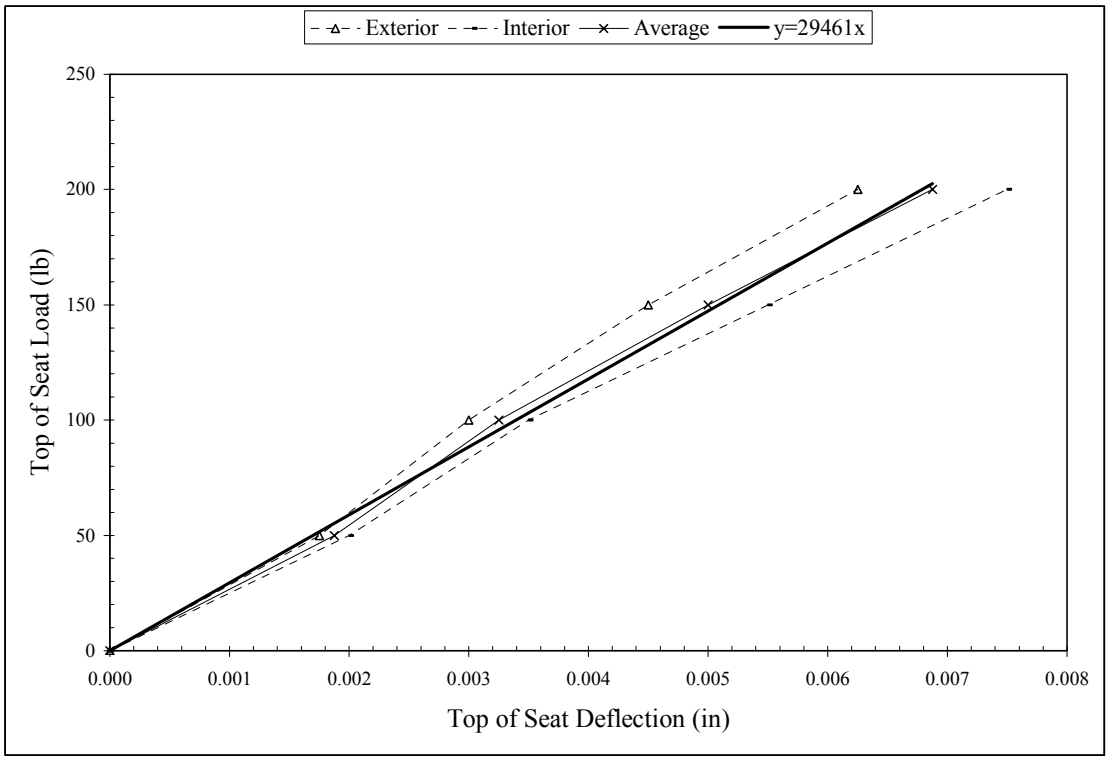

Figure A. 38—18LH800 Regression 0-200lb

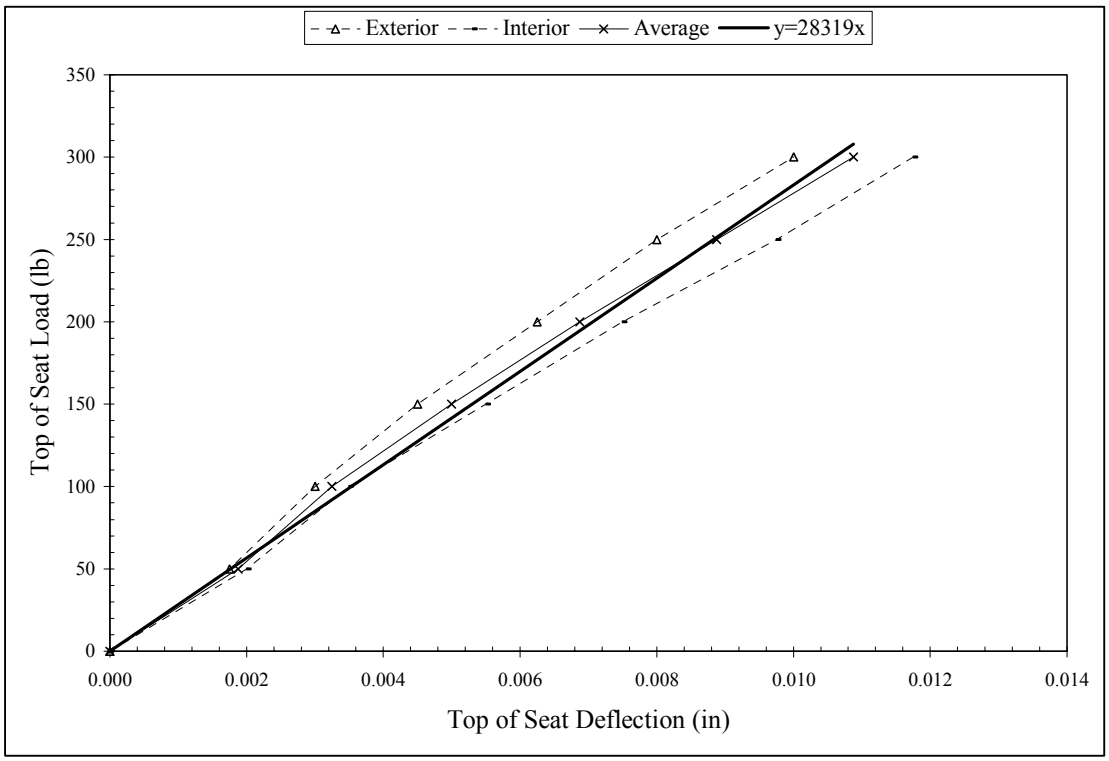

Figure A. 39—18LH800 Regression 0-300lb