Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WT	MH	CTD						

Test Group: AITR1392-8HG-WT-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Tensile Condition: CTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WT-A-MH1-CTD-1	10.004	1.0050	0.1157	0.0096	9896.00	LAT	85.106	82.056	3.73	3.60	
AITR1392-8HG-WT-A-MH1-CTD-2	9.996	1.0060	0.1167	0.0097	9907.00	LGT	84.387	82.066	3.77	3.67	
AITR1392-8HG-WT-A-MH1-CTD-3	10.004	1.0060	0.1158	0.0097	10144.00	LAT	87.077	84.029	3.87	3.73	
AITR1392-8HG-WT-A-MH1-CTD-4	9.997	1.0060	0.1194	0.0100	NT				NT		
AITR1392-8HG-WT-A-MH2-CTD-1	10.004	1.0060	0.1332	0.0111	11010.00	LAT	82.165	91.203	3.58	3.97	
AITR1392-8HG-WT-A-MH2-CTD-2	10.003	1.0060	0.1338	0.0112	10696.00	LAT	79.463	88.602	3.64	4.06	
AITR1392-8HG-WT-A-MH2-CTD-3	10.000	1.0060	0.1306	0.0109	10815.00	LWT	82.316	89.587	3.76	4.10	
AITR1392-8HG-WT-A-MH2-CTD-4	10.002	1.0050	0.1344	0.0112	NT				NT		
AITR1392-8HG-WT-B-MH1-CTD-1	9.996	1.0000	0.1170	0.0098	9589.00	LAT	81.957	79.908	3.92	3.82	
AITR1392-8HG-WT-B-MH1-CTD-2	10.004	1.0040	0.1190	0.0099	9843.00	LAT	82.385	81.698	3.85	3.82	
AITR1392-8HG-WT-B-MH1-CTD-3	10.002	1.0050	0.1190	0.0099	9695.00	LWT	81.065	80.390	3.93	3.89	
AITR1392-8HG-WT-B-MH1-CTD-4	9.996	1.0040	0.1200	0.0100	NT				NT		
AITR1392-8HG-WT-B-MH2-CTD-1	10.000	1.0060	0.1210	0.0101	8913.00	DGM	73.222	73.832	3.81	3.84	
AITR1392-8HG-WT-B-MH2-CTD-2	10.000	1.0070	0.1200	0.0100	9070.00	DGM/AGT	75.058	75.058	3.98	3.98	
AITR1392-8HG-WT-B-MH2-CTD-3	9.998	1.0060	0.1200	0.0100	9103.00	LAT	75.406	75.406	3.90	3.90	
AITR1392-8HG-WT-B-MH2-CTD-4	10.000	1.0070	0.1190	0.0099	NT				NT		
AITR1392-8HG-WT-C-MH1-CTD-1	10.000	1.0060	0.1209	0.0101	9497.00	LWT	78.084	78.670	3.63	3.66	
AITR1392-8HG-WT-C-MH1-CTD-2	10.004	1.0060	0.1212	0.0101	9131.00	DGM/LAT	74.889	75.638	3.73	3.77	
AITR1392-8HG-WT-C-MH1-CTD-3	9.997	1.0080	0.1198	0.0100	9880.00	LWT	81.816	81.680	3.74	3.73	
AITR1392-8HG-WT-C-MH1-CTD-4	9.997	1.0070	0.1180	0.0098	NT				NT		
AITR1392-8HG-WT-C-MH2-CTD-1	9.998	1.0070	0.1195	0.0100	9343.00	LWT	77.641	77.317	3.67	3.65	
AITR1392-8HG-WT-C-MH2-CTD-2	9.994	1.0070	0.1191	0.0099	9587.00	LAT	79.936	79.336	3.75	3.73	
AITR1392-8HG-WT-C-MH2-CTD-3	10.000	1.0070	0.1192	0.0099	9607.00	LAT	80.035	79.502	3.84	3.81	
AITR1392-8HG-WT-C-MH2-CTD-4	10.000	1.0070	0.1179	0.0098	NT				NT		
Minimum	9.9940	1.0000	0.1157	0.0096	8913.00		73.222	73.832	3.578	3.600	
Maximum	10.0040	1.0080	0.1344	0.0112	11010.00		87.077	91.203	3.984	4.097	
Average	9.9998	1.0058	0.1213	0.0101	9762.56		80.112	80.888	3.784	3.819	
Standard Deviation	0.0031	0.0016	0.0056	0.0005	599.56		3.806	4.971	0.113	0.143	
Coefficient of Variation (%)	0.03	0.16	4.61	4.61	6.14		4.75	6.15	2.98	3.74	
No. Specimens	24	24	24	24	18		18	18	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

B-MH2-4 Modulus from 1150 to 3150

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WT	MH	RTD						

Test Group: AITR1392-8HG-WT-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Tensile Condition: RTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WT-A-MH1-RTD-1	10.003	1.0060	0.1200	0.0100	8206.00	LAT	67.975	67.975	3.57	3.57	
AITR1392-8HG-WT-A-MH1-RTD-2	10.001	1.0060	0.1190	0.0099	8450.00	LAT	70.585	69.997	3.62	3.59	
AITR1392-8HG-WT-A-MH1-RTD-3	10.004	1.0060	0.1170	0.0098	7988.00	LAB	67.866	66.170	3.74	3.65	
AITR1392-8HG-WT-A-MH1-RTD-4	10.005	1.0070	0.1150	0.0096	7959.00	LAT	68.728	65.864	3.71	3.56	
AITR1392-8HG-WT-A-MH2-RTD-1	10.001	1.0060	0.1280	0.0107	8863.00	LAT	68.829	73.418	3.47	3.70	
AITR1392-8HG-WT-A-MH2-RTD-2	10.006	1.0040	0.1320	0.0110	FM	LIT			NT		
AITR1392-8HG-WT-A-MH2-RTD-3	10.000	1.0040	0.1300	0.0108	8470.00	LGM	64.894	70.302	GE		
AITR1392-8HG-WT-A-MH2-RTD-4	10.005	1.0050	0.1280	0.0107	8815.00	LAT	68.525	73.093	3.64	3.88	
AITR1392-8HG-WT-B-MH1-RTD-1	9.998	1.0050	0.1170	0.0098	8525.00	LGT	72.501	70.688	3.69	3.60	
AITR1392-8HG-WT-B-MH1-RTD-2	9.990	1.0030	0.1130	0.0094	8244.00	LAT	72.738	68.495	3.74	3.52	
AITR1392-8HG-WT-B-MH1-RTD-3	9.994	1.0030	0.1200	0.0100	8707.00	LGM	72.341	72.341	3.57	3.57	
AITR1392-8HG-WT-B-MH1-RTD-4	10.000	1.0040	0.1190	0.0099	NT				NT		
AITR1392-8HG-WT-B-MH2-RTD-1	9.999	1.0050	0.1210	0.0101	7793.00	LAB	64.085	64.619	3.53	3.56	
AITR1392-8HG-WT-B-MH2-RTD-2	9.995	1.0060	0.1210	0.0101	7760.00	LAT	63.750	64.281	3.55	3.58	
AITR1392-8HG-WT-B-MH2-RTD-3	9.997	1.0030	0.1230	0.0103	7890.00	LAT	63.954	65.553	3.49	3.58	
AITR1392-8HG-WT-B-MH2-RTD-4	9.995	1.0050	0.1200	0.0100	NT				NT		
AITR1392-8HG-WT-C-MH1-RTD-1	9.998	1.0070	0.1188	0.0099	7924.00	LAT	66.237	65.574	3.58	3.54	
AITR1392-8HG-WT-C-MH1-RTD-2	10.001	1.0070	0.1104	0.0092	7954.00	LAT	71.546	65.823	3.94	3.63	
AITR1392-8HG-WT-C-MH1-RTD-3	10.000	1.0070	0.1206	0.0101	8371.00	DGM/LAT/LAB	68.929	69.273	3.58	3.60	
AITR1392-8HG-WT-C-MH1-RTD-4	9.997	1.0060	0.1199	0.0100	NT				NT		
AITR1392-8HG-WT-C-MH2-RTD-1	9.998	1.0080	0.1196	0.0100	8059.00	LAT	66.848	66.625	3.66	3.65	
AITR1392-8HG-WT-C-MH2-RTD-2	9.999	1.0060	0.1172	0.0098	8248.00	LGT	69.956	68.323	3.63	3.54	
AITR1392-8HG-WT-C-MH2-RTD-3	9.998	1.0060	0.1175	0.0098	8021.00	LAT	67.857	66.443	3.72	3.65	
AITR1392-8HG-WT-C-MH2-RTD-4	9.999	1.0070	0.1186	0.0099	NT				NT		
Minimum	9.9900	1.0030	0.1104	0.0092	7760.00		63.750	64.281	3.470	3.519	
Maximum	10.0060	1.0080	0.1320	0.0110	8863.00		72.738	73.418	3.942	3.883	
Average	9.9993	1.0055	0.1202	0.0100	8223.53		68.323	68.150	3.635	3.609	
Standard Deviation	0.0038	0.0014	0.0050	0.0004	340.41		2.876	2.851	0.112	0.083	
Coefficient of Variation (%)	0.04	0.14	4.20	4.20	4.14		4.21	4.18	3.09	2.29	
No. Specimens	24	24	24	24	19		19	19	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

WT-A-MH2-RTD-4:Modulus from 1500 to 3500

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WT	MH	ETW						

Test Group: AITR1392-8HG-WT-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Tensile Condition: ETW

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WT-A-MH1-ETW-1	10.013	1.0060	0.1150	0.0096	5385.00	LAT	46.547	44.607	3.56	3.42	
AITR1392-8HG-WT-A-MH1-ETW-2	10.009	1.0060	0.1200	0.0100	5389.00	LAT	44.640	44.640	3.42	3.42	
AITR1392-8HG-WT-A-MH1-ETW-3	10.009	1.0070	0.1180	0.0098	5535.00	LGM	46.581	45.804	3.58	3.52	
AITR1392-8HG-WT-A-MH1-ETW-4					NT				NT		
AITR1392-8HG-WT-A-MH2-ETW-1	10.008	1.0050	0.1270	0.0106	5913.00	LAT	46.327	49.030	3.27	3.46	
AITR1392-8HG-WT-A-MH2-ETW-2	10.014	1.0050	0.1270	0.0106	5897.00	LGT	46.202	48.897	3.30	3.49	
AITR1392-8HG-WT-A-MH2-ETW-3	10.009	1.0060	0.1260	0.0105	5596.00	LAT	44.148	46.355	3.38	3.55	
AITR1392-8HG-WT-A-MH2-ETW-4					NT				NT		
AITR1392-8HG-WT-B-MH1-ETW-1	10.008	1.0040	0.1200	0.0100	5185.00	LGM	43.036	43.036	3.11	3.11	
AITR1392-8HG-WT-B-MH1-ETW-2	10.003	1.0050	0.1130	0.0094	5473.00	LGB	48.193	45.381	3.42	3.22	
AITR1392-8HG-WT-B-MH1-ETW-3	10.010	1.0060	0.1180	0.0098	5569.00	LGT	46.913	46.132	4.01	3.94	
AITR1392-8HG-WT-B-MH1-ETW-4					NT				NT		
AITR1392-8HG-WT-B-MH2-ETW-1	10.004	1.0060	0.1220	0.0102	5139.00	LGM	41.872	42.570	3.26	3.31	
AITR1392-8HG-WT-B-MH2-ETW-2	10.012	1.0060	0.1220	0.0102	5168.00	LGM	42.108	42.810	3.15	3.20	
AITR1392-8HG-WT-B-MH2-ETW-3	10.010	1.0020	0.1210	0.0101	5071.00	LGT	41.825	42.174	3.54	3.57	
AITR1392-8HG-WT-B-MH2-ETW-4					NT				NT		
AITR1392-8HG-WT-C-MH1-ETW-1	10.009	1.0060	0.1190	0.0099	5245.00	LGM	43.813	43.448	3.27	3.25	
AITR1392-8HG-WT-C-MH1-ETW-2	10.009	1.0060	0.1190	0.0099	5145.00	LGM	42.977	42.619	3.34	3.32	
AITR1392-8HG-WT-C-MH1-ETW-3	10.014	1.0070	0.1190	0.0099	5227.00	LGT	43.619	43.256	3.29	3.26	
AITR1392-8HG-WT-C-MH1-ETW-4					NT				NT		
AITR1392-8HG-WT-C-MH2-ETW-1	10.001	1.0070	0.1170	0.0098	5169.00	LGB	43.872	42.776	3.42	3.33	
AITR1392-8HG-WT-C-MH2-ETW-2	10.008	1.0060	0.1180	0.0098	5138.00	LAT	43.283	42.561	3.40	3.35	
AITR1392-8HG-WT-C-MH2-ETW-3	10.010	1.0050	0.1160	0.0097	5339.00	LGT	45.797	44.270	3.54	3.42	
AITR1392-8HG-WT-C-MH2-ETW-4					NT				NT		
Minimum	10.0010	1.0020	0.1130	0.0094	5071.00		41.825	42.174	3.113	3.113	
Maximum	10.0140	1.0070	0.1270	0.0106	5913.00		48.193	49.030	4.010	3.943	
Average	10.0089	1.0056	0.1198	0.0100	5365.72		44.542	44.465	3.404	3.397	
Standard Deviation	0.0035	0.0012	0.0039	0.0003	254.49		1.931	2.108	0.202	0.187	
Coefficient of Variation (%)	0.03	0.12	3.24	3.24	4.74		4.33	4.74	5.94	5.49	
No. Specimens	18	18	18	18	18		18	18	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WT	MH	ETW2						

Test Group: AITR1392-8HG-WT-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Tensile Condition: ETW2

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WT-A-MH1-ETW2-1	10.005	1.0050	0.1180	0.0098	4976.00	LGT	41.960	41.260	3.76	3.70	
AITR1392-8HG-WT-A-MH1-ETW2-2	10.004	1.0000	0.1200	0.0100	5096.00	LGM	42.467	42.467	4.20	4.20	
AITR1392-8HG-WT-A-MH1-ETW2-3	10.008	1.0050	0.1200	0.0100	5220.00	LGT	43.284	43.284	4.03	4.03	
AITR1392-8HG-WT-A-MH1-ETW2-4					NT				NT		
AITR1392-8HG-WT-A-MH2-ETW2-1	10.008	1.0050	0.1300	0.0108	5588.00	LGT	42.771	46.335	4.01	4.35	
AITR1392-8HG-WT-A-MH2-ETW2-2	10.002	1.0050	0.1260	0.0105	5526.00	LGT	43.639	45.821	3.96	4.16	
AITR1392-8HG-WT-A-MH2-ETW2-3	10.008	1.0060	0.1260	0.0105	NT				NT		
AITR1392-8HG-WT-A-MH2-ETW2-4	10.010	1.0050	0.1300	0.0108	5431.00	LAT	41.569	45.033	4.28	4.64	
AITR1392-8HG-WT-B-MH1-ETW2-1	10.010	1.0050	0.1200	0.0100	5178.00	LAT	42.935	42.935	4.29	4.29	
AITR1392-8HG-WT-B-MH1-ETW2-2	10.010	1.0050	0.1200	0.0100	4931.00	LGM	40.887	40.887	GE		
AITR1392-8HG-WT-B-MH1-ETW2-3	10.007	1.0050	0.1200	0.0100	5252.00	LGM	43.549	43.549	3.95	3.95	
AITR1392-8HG-WT-B-MH1-ETW2-4					NT				NT		
AITR1392-8HG-WT-B-MH2-ETW2-1	10.006	1.0060	0.1200	0.0100	4863.00	LGM	40.283	40.283	3.99	3.99	
AITR1392-8HG-WT-B-MH2-ETW2-2	10.009	1.0060	0.1200	0.0100	4685.00	LGM	38.809	38.809	GE		
AITR1392-8HG-WT-B-MH2-ETW2-3	10.004	1.0070	0.1180	0.0098	4686.00	LGT	39.436	38.779	4.83	4.75	
AITR1392-8HG-WT-B-MH2-ETW2-4					NT				NT		
AITR1392-8HG-WT-C-MH1-ETW2-1	10.012	1.0070	0.1140	0.0095	4741.00	LGB	41.299	39.234	4.51	4.28	
AITR1392-8HG-WT-C-MH1-ETW2-2	10.012	1.0070	0.1180	0.0098	4920.00	LGT	41.405	40.715	GE		
AITR1392-8HG-WT-C-MH1-ETW2-3	10.008	1.0070	0.1180	0.0098	4770.00	LGT	40.143	39.474	4.64	4.56	
AITR1392-8HG-WT-C-MH1-ETW2-4					NT				NT		
AITR1392-8HG-WT-C-MH2-ETW2-1	10.004	1.0060	0.1130	0.0094	4898.00	LGM	43.087	40.573	GE		
AITR1392-8HG-WT-C-MH2-ETW2-2	10.008	1.0070	0.1170	0.0098	4904.00	LGM	41.623	40.583	4.47	4.36	
AITR1392-8HG-WT-C-MH2-ETW2-3	10.006	1.0070	0.1180	0.0098	4838.00	LGT	40.715	40.036	3.65	3.59	
AITR1392-8HG-WT-C-MH2-ETW2-4					NT				NT		
Minimum	10.0020	1.0000	0.1130	0.0094	4685.00		38.809	38.779	3.653	3.592	
Maximum	10.0120	1.0070	0.1300	0.0108	5588.00		43.639	46.335	4.830	4.750	
Average	10.0074	1.0056	0.1203	0.0100	5027.94		41.659	41.670	4.184	4.203	
Standard Deviation	0.0028	0.0016	0.0046	0.0004	280.87		1.429	2.360	0.339	0.333	
Coefficient of Variation (%)	0.03	0.16	3.84	3.84	5.59		3.43	5.66	8.10	7.93	
No. Specimens	19	19	19	19	18		18	18	14	14	

Notes:

NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

WT-B-MH2-ETW2-3:Modulus from 2400 to 4400

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FT	MH	CTD						

Test Group: AITR1392-8HG-FT-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Tensile Condition: CTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-FT-A-MH1-CTD-1	9.996	1.0060	0.1180	0.0098	8216.00	DGM	69.212	68.058	3.68	3.62	
AITR1392-8HG-FT-A-MH1-CTD-2	9.995	1.0060	0.1190	0.0099	8204.00	DGM	68.530	67.959	3.52	3.49	
AITR1392-8HG-FT-A-MH1-CTD-3	9.998	1.0050	0.1170	0.0098	8063.00	DGM/LAT	68.572	66.857	3.61	3.52	
AITR1392-8HG-FT-A-MH1-CTD-4	9.996	1.0050	0.1190	0.0099	NT				NT		
AITR1392-8HG-FT-A-MH2-CTD-1	10.004	1.0040	0.1200	0.0100	8411.00	DGM/EWT	69.812	69.812	3.58	3.58	
AITR1392-8HG-FT-A-MH2-CTD-2	10.004	0.9960	0.1160	0.0097	8220.00	LAT	71.147	68.775	3.65	3.53	
AITR1392-8HG-FT-A-MH2-CTD-3	10.001	1.0060	0.1180	0.0098	8418.00	LWT	70.914	69.732	3.69	3.63	
AITR1392-8HG-FT-A-MH2-CTD-4	10.015	1.0070	0.1180	0.0098	NT				NT		
AITR1392-8HG-FT-B-MH1-CTD-1	9.992	1.0040	0.1200	0.0100	7773.00	LAT	64.517	64.517	3.37	3.37	
AITR1392-8HG-FT-B-MH1-CTD-2	9.990	1.0070	0.1210	0.0101	7767.00	DGM	63.744	64.275	3.52	3.55	
AITR1392-8HG-FT-B-MH1-CTD-3	9.993	1.0080	0.1210	0.0101	7695.00	DGM/LWT	63.090	63.616	3.54	3.57	
AITR1392-8HG-FT-B-MH1-CTD-4	9.992	1.0060	0.1230	0.0103	NT				NT		
AITR1392-8HG-FT-B-MH2-CTD-1	10.002	1.0070	0.1190	0.0099	8924.00	DGM	74.470	73.850	3.55	3.52	
AITR1392-8HG-FT-B-MH2-CTD-2	10.003	1.0070	0.1200	0.0100	8831.00	DGM	73.080	73.080	3.60	3.60	
AITR1392-8HG-FT-B-MH2-CTD-3	10.001	1.0070	0.1190	0.0099	8547.00	DGM	71.324	70.730	3.58	3.55	
AITR1392-8HG-FT-B-MH2-CTD-4	10.004	1.0060	0.1210	0.0101	NT				NT		
AITR1392-8HG-FT-C-MH1-CTD-1	10.009	1.0060	0.1170	0.0098	8017.00	DGM	68.113	66.410	3.63	3.54	
AITR1392-8HG-FT-C-MH1-CTD-2	10.006	1.0070	0.1130	0.0094	8230.00	DGT	72.326	68.107	3.82	3.60	
AITR1392-8HG-FT-C-MH1-CTD-3	10.007	1.0070	0.1140	0.0095	8442.00	DGM	73.538	69.861	3.73	3.54	
AITR1392-8HG-FT-C-MH1-CTD-4	10.004	1.0040	0.1160	0.0097	NT				NT		
AITR1392-8HG-FT-C-MH2-CTD-1	10.010	1.0070	0.1130	0.0094	8516.00	DGM	74.839	70.473	3.89	3.66	
AITR1392-8HG-FT-C-MH2-CTD-2	10.006	1.0050	0.1180	0.0098	8312.00	DGM	70.090	68.922	3.67	3.61	
AITR1392-8HG-FT-C-MH2-CTD-3	10.005	1.0060	0.1190	0.0099	8613.00	LAT	71.946	71.347	3.59	3.56	
AITR1392-8HG-FT-C-MH2-CTD-4	10.005	1.0060	0.1200	0.0100	NT				NT		
Minimum	9.9900	0.9960	0.1130	0.0094	7695.00		63.090	63.616	3.366	3.366	
Maximum	10.0150	1.0080	0.1230	0.0103	8924.00		74.839	73.850	3.888	3.661	
Average	10.0016	1.0056	0.1183	0.0099	8288.83		69.959	68.688	3.623	3.558	
Standard Deviation	0.0064	0.0023	0.0025	0.0002	344.11		3.463	2.834	0.118	0.065	
Coefficient of Variation (%)	0.06	0.23	2.14	2.14	4.15		4.95	4.13	3.27	1.84	
No. Specimens	24	24	24	24	18		18	18	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FT	MH	RTD						

Test Group: AITR1392-8HG-FT-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Tensile Condition: RTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-FT-A-MH1-RTD-1	10.000	1.0060	0.1190	0.0099	7576.79	LAT	63.291	62.763	3.23	3.20	
AITR1392-8HG-FT-A-MH1-RTD-2	10.000	1.0050	0.1200	0.0100	7549.31	LAT	62.598	62.598	3.29	3.29	
AITR1392-8HG-FT-A-MH1-RTD-3	10.000	1.0040	0.1160	0.0097	6433.77	LGT	55.243	53.401	3.43	3.31	
AITR1392-8HG-FT-A-MH1-RTD-4					NT				NT		
AITR1392-8HG-FT-A-MH2-RTD-1	10.000	1.0060	0.1170	0.0098	6820.05	LAT	57.943	56.495	3.29	3.20	
AITR1392-8HG-FT-A-MH2-RTD-2	10.000	1.0060	0.1200	0.0100	7555.61	LAB	62.588	62.588	3.25	3.25	
AITR1392-8HG-FT-A-MH2-RTD-3	10.000	1.0060	0.1180	0.0098	7169.07	SMT	60.392	59.386	3.48	3.42	
AITR1392-8HG-FT-A-MH2-RTD-4					NT				NT		
AITR1392-8HG-FT-B-MH1-RTD-1	10.000	1.0040	0.1180	0.0098	6945.85	LAT	58.629	57.651	3.29	3.23	
AITR1392-8HG-FT-B-MH1-RTD-2	10.000	1.0070	0.1220	0.0102	7329.44	LAB	59.660	60.654	3.42	3.47	
AITR1392-8HG-FT-B-MH1-RTD-3	10.000	1.0070	0.1200	0.0100	7092.57	LAT	58.694	58.694	3.41	3.41	
AITR1392-8HG-FT-B-MH1-RTD-4					NT				NT		
AITR1392-8HG-FT-B-MH2-RTD-1	10.000	1.0070	0.1190	0.0099	7860.44	LGB	65.595	65.048	3.18	3.15	
AITR1392-8HG-FT-B-MH2-RTD-2	10.000	1.0070	0.1210	0.0101	7569.42	LAB	62.122	62.640	3.50	3.53	
AITR1392-8HG-FT-B-MH2-RTD-3	10.000	1.0070	0.1190	0.0099	8028.70	LGM	66.999	66.441	3.32	3.29	
AITR1392-8HG-FT-B-MH2-RTD-4					NT				NT		
AITR1392-8HG-FT-C-MH1-RTD-1	10.000	1.0060	0.1130	0.0094	7245.03	LAT	63.733	60.015	3.45	3.25	
AITR1392-8HG-FT-C-MH1-RTD-2	10.000	1.0070	0.1130	0.0094	6646.20	LAB	58.407	55.000	3.48	3.28	
AITR1392-8HG-FT-C-MH1-RTD-3					NT				NT		
AITR1392-8HG-FT-C-MH1-RTD-4	10.000	1.0050	0.1140	0.0095	7420.17	LAT	64.765	61.527	3.51	3.33	
AITR1392-8HG-FT-C-MH2-RTD-1	10.000	1.0050	0.1160	0.0097	7391.92	LAB	63.406	61.293	3.55	3.43	
AITR1392-8HG-FT-C-MH2-RTD-2	10.000	1.0060	0.1190	0.0099	7429.89	LAB	62.064	61.546	3.48	3.45	
AITR1392-8HG-FT-C-MH2-RTD-3	10.000	1.0060	0.1190	0.0099	7449.51	LAB	62.228	61.709	3.43	3.40	
AITR1392-8HG-FT-C-MH2-RTD-4					NT				NT		
Minimum	10.0000	1.0040	0.1130	0.0094	6433.77		55.243	53.401	3.177	3.151	
Maximum	10.0000	1.0070	0.1220	0.0102	8028.70		66.999	66.441	3.548	3.531	
Average	10.0000	1.0059	0.1179	0.0098	7306.32		61.575	60.525	3.386	3.328	
Standard Deviation	0.0000	0.0010	0.0026	0.0002	404.45		3.021	3.328	0.112	0.108	
Coefficient of Variation (%)	0.00	0.10	2.22	2.22	5.54		4.91	5.50	3.30	3.25	
No. Specimens	18	18	18	18	18		18	18	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FT	MH	ETW						

Test Group: AITR1392-8HG-FT-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Tensile Condition: ETW

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-FT-A-MH1-ETW-1	10.003	1.0050	0.1180	0.0098	4272.00	LAB	36.023	35.423	3.05	3.00	
AITR1392-8HG-FT-A-MH1-ETW-2	10.007	1.0060	0.1180	0.0098	4639.00	LAT	39.079	38.428	GE		
AITR1392-8HG-FT-A-MH1-ETW-3	10.002	1.0050	0.1180	0.0098	4579.00	LAT	38.612	37.968	3.05	3.00	
AITR1392-8HG-FT-A-MH1-ETW-4	10.006	1.0060	0.1200	0.0100	NT				NT		
AITR1392-8HG-FT-A-MH2-ETW-1	10.023	1.0070	0.1220	0.0102	4543.00	LAT	36.979	37.595	3.07	3.12	
AITR1392-8HG-FT-A-MH2-ETW-2	10.014	1.0070	0.1210	0.0101	4680.00	LAT	38.409	38.729	2.93	2.96	
AITR1392-8HG-FT-A-MH2-ETW-3	10.019	1.0070	0.1190	0.0099	4720.00	LAT	39.388	39.060	3.11	3.09	
AITR1392-8HG-FT-A-MH2-ETW-4	10.001	1.0070	0.1160	0.0097	NT				NT		
AITR1392-8HG-FT-B-MH1-ETW-1	9.993	1.0070	0.1190	0.0099	4692.00	LAT	39.154	38.828	2.96	2.94	
AITR1392-8HG-FT-B-MH1-ETW-2	9.999	1.0050	0.1190	0.0099	4684.00	LAT	39.166	38.839	3.12	3.09	
AITR1392-8HG-FT-B-MH1-ETW-3	9.990	1.0030	0.1180	0.0098	4701.00	LAT	39.720	39.058	3.11	3.05	
AITR1392-8HG-FT-B-MH1-ETW-4	9.994	1.0020	0.1180	0.0098	NT				NT		
AITR1392-8HG-FT-B-MH2-ETW-1	10.010	1.0070	0.1210	0.0101	4917.00	LAT	40.354	40.690	3.03	3.06	
AITR1392-8HG-FT-B-MH2-ETW-2	10.013	1.0070	0.1170	0.0098	4820.00	LAT	40.910	39.887	3.08	3.00	
AITR1392-8HG-FT-B-MH2-ETW-3	10.016	1.0070	0.1210	0.0101	4822.00	LAT	39.574	39.904	3.04	3.06	
AITR1392-8HG-FT-B-MH2-ETW-4	10.009	1.0060	0.1200	0.0100	NT				NT		
AITR1392-8HG-FT-C-MH1-ETW-1	10.015	1.0070	0.1150	0.0096	4679.00	LAT	40.404	38.721	3.20	3.07	
AITR1392-8HG-FT-C-MH1-ETW-2	10.021	1.0090	0.1180	0.0098	4830.00	LAT	40.567	39.891	3.17	3.12	
AITR1392-8HG-FT-C-MH1-ETW-3	10.010	1.0080	0.1160	0.0097	4741.00	LAT	40.546	39.195	3.03	2.93	
AITR1392-8HG-FT-C-MH1-ETW-4	10.020	1.0080	0.1170	0.0098	NT				NT		
AITR1392-8HG-FT-C-MH2-ETW-1	10.015	1.0060	0.1190	0.0099	4769.00	LAT	39.837	39.505	3.16	3.13	
AITR1392-8HG-FT-C-MH2-ETW-2	10.009	1.0070	0.1190	0.0099	4691.00	LAT	39.146	38.820	3.11	3.09	
AITR1392-8HG-FT-C-MH2-ETW-3	10.017	1.0070	0.1200	0.0100	4491.00	LAT	37.165	37.165	3.12	3.12	
AITR1392-8HG-FT-C-MH2-ETW-4	10.024	1.0070	0.1200	0.0100	NT				NT		
Minimum	9.9900	1.0020	0.1150	0.0096	4272.00		36.023	35.423	2.934	2.928	
Maximum	10.0240	1.0090	0.1220	0.0102	4917.00		40.910	40.690	3.202	3.133	
Average	10.0096	1.0064	0.1187	0.0099	4681.67		39.169	38.761	3.079	3.048	
Standard Deviation	0.0096	0.0015	0.0018	0.0001	146.57		1.337	1.196	0.070	0.067	
Coefficient of Variation (%)	0.10	0.15	1.48	1.48	3.13		3.41	3.08	2.29	2.18	
No. Specimens	24	24	24	24	18		18	18	17	17	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FT	MH	ETW2						

Test Group: AITR1392-8HG-FT-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Tensile Condition: ETW2

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-FT-A-MH1-ETW2-1	10.006	1.0070	0.1200	0.0100	4391.00	LAB	36.337	36.337	3.57	3.57	
AITR1392-8HG-FT-A-MH1-ETW2-2	10.008	1.0050	0.1210	0.0101	4237.00	LAB	34.842	35.133	3.35	3.37	
AITR1392-8HG-FT-A-MH1-ETW2-3	10.009	1.0070	0.1170	0.0098	4499.00	LAT	38.186	37.231	3.74	3.65	
AITR1392-8HG-FT-A-MH1-ETW2-4	10.000	1.0070	0.1200	0.0100	NT				NT		
AITR1392-8HG-FT-A-MH2-ETW2-1	10.012	1.0080	0.1180	0.0098	3925.00	LAT	32.999	32.449	3.61	3.55	
AITR1392-8HG-FT-A-MH2-ETW2-2	10.001	1.0050	0.1150	0.0096	4390.00	LAT	37.984	36.401	4.13	3.96	
AITR1392-8HG-FT-A-MH2-ETW2-3	10.016	1.0070	0.1170	0.0098	4255.00	LAT	36.115	35.212	4.29	4.18	
AITR1392-8HG-FT-A-MH2-ETW2-4	10.006	1.0050	0.1190	0.0099	NT				NT		
AITR1392-8HG-FT-B-MH1-ETW2-1	9.996	1.0020	0.1230	0.0103	4441.00	LAT	36.034	36.934	3.72	3.81	
AITR1392-8HG-FT-B-MH1-ETW2-2	9.997	1.0050	0.1160	0.0097	4226.00	LAT	36.250	35.041	4.36	4.21	
AITR1392-8HG-FT-B-MH1-ETW2-3	10.000	1.0060	0.1220	0.0102	4551.00	LAT	37.081	37.699	4.11	4.18	
AITR1392-8HG-FT-B-MH1-ETW2-4	10.030	1.0040	0.1190	0.0099	NT				NT		
AITR1392-8HG-FT-B-MH2-ETW2-1	10.010	1.0060	0.1180	0.0098	4551.00	LGM	38.338	37.699	4.20	4.13	
AITR1392-8HG-FT-B-MH2-ETW2-2	10.011	1.0070	0.1170	0.0098	4628.00	FGM	39.281	38.299	GE		
AITR1392-8HG-FT-B-MH2-ETW2-3	10.011	1.0070	0.1180	0.0098	4481.00	LGM	37.711	37.082	3.85	3.79	
AITR1392-8HG-FT-B-MH2-ETW2-4	10.010	1.0060	0.1200	0.0100	4516.00	LGM	37.409	37.409	4.46	4.46	
AITR1392-8HG-FT-C-MH1-ETW2-1	10.013	1.0070	0.1160	0.0097	4814.00	LGM	41.212	39.838	3.55	3.43	
AITR1392-8HG-FT-C-MH1-ETW2-2	10.019	1.0060	0.1180	0.0098	4453.00	LAT	37.512	36.887	3.69	3.62	
AITR1392-8HG-FT-C-MH1-ETW2-3	10.018	1.0070	0.1160	0.0097	4508.00	LAT	38.592	37.306	3.60	3.48	
AITR1392-8HG-FT-C-MH1-ETW2-4	10.010	1.0070	0.1160	0.0097	NT				NT		
AITR1392-8HG-FT-C-MH2-ETW2-1	10.015	1.0050	0.1160	0.0097	4543.00	LAT	38.969	37.670	3.87	3.74	
AITR1392-8HG-FT-C-MH2-ETW2-2	10.016	1.0010	0.1200	0.0100	4328.00	LAT	36.031	36.031	3.71	3.71	
AITR1392-8HG-FT-C-MH2-ETW2-3	10.016	1.0070	0.1200	0.0100	4669.00	LAT	38.638	38.638	3.61	3.61	
AITR1392-8HG-FT-C-MH2-ETW2-4	10.015	1.0070	0.1170	0.0098	NT				NT		
Minimum	9.9960	1.0010	0.1150	0.0096	3925.00		32.999	32.449	3.346	3.374	
Maximum	10.0300	1.0080	0.1230	0.0103	4814.00		41.212	39.838	4.458	4.458	
Average	10.0102	1.0059	0.1183	0.0099	4442.42		37.343	36.805	3.856	3.803	
Standard Deviation	0.0078	0.0017	0.0021	0.0002	194.71		1.814	1.606	0.322	0.313	
Coefficient of Variation (%)	0.08	0.17	1.79	1.79	4.38		4.86	4.36	8.36	8.23	
No. Specimens	24	24	24	24	19		19	19	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WC	MH	CTD						

Test Group: AITR1392-8HG-WC-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Compression Condition: CTD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WC-A-MH1-CTD-1	5.508	0.5070	0.1120	0.0093	6490.81	BGB	114.307	106.687	4.22	3.94	0.150
AITR1392-8HG-WC-A-MH1-CTD-2	5.507	0.5070	0.1140	0.0095	5541.06	HGM	95.869	91.076	4.70	4.46	0.161
AITR1392-8HG-WC-A-MH1-CTD-3	5.507	0.5060	0.1170	0.0098	6092.48	BGM	102.910	100.337	4.19	4.09	0.147
AITR1392-8HG-WC-A-MH1-CTD-4	5.506	0.5060	0.1140	0.0095	NT				NT		NT
AITR1392-8HG-WC-A-MH2-CTD-1	5.509	0.5000	0.1190	0.0099	6302.26	BGM	105.920	105.038	4.96	4.92	GE
AITR1392-8HG-WC-A-MH2-CTD-2	5.507	0.5080	0.1190	0.0099	6456.85	BGM	106.810	105.919	4.22	4.18	0.177
AITR1392-8HG-WC-A-MH2-CTD-3	5.508	0.5080	0.1200	0.0100	6902.60	BGM	113.232	113.232	4.28	4.28	0.154
AITR1392-8HG-WC-A-MH2-CTD-4	5.507	0.5080	0.1200	0.0100	NT				NT		NT
AITR1392-8HG-WC-B-MH1-CTD-1	5.508	0.5060	0.1150	0.0096	6451.08	BGM	110.862	106.243	4.85	4.64	0.121
AITR1392-8HG-WC-B-MH1-CTD-2	5.510	0.5060	0.1180	0.0098	6340.14	BGM	106.186	104.416	4.06	3.99	0.152
AITR1392-8HG-WC-B-MH1-CTD-3	5.509	0.5060	0.1200	0.0100	6063.04	BGM	99.852	99.852	4.24	4.24	0.155
AITR1392-8HG-WC-B-MH1-CTD-4	5.509	0.5060	0.1180	0.0098	NT				NT		NT
AITR1392-8HG-WC-B-MH2-CTD-1	5.507	0.5060	0.1210	0.0101	6775.75	HGM	110.668	111.590	3.73	3.76	0.161
AITR1392-8HG-WC-B-MH2-CTD-2	5.507	0.5050	0.1200	0.0100	6273.06	BGM	103.516	103.516	4.27	4.27	0.153
AITR1392-8HG-WC-B-MH2-CTD-3	5.509	0.5050	0.1140	0.0095	7167.42	HGM	124.499	118.274	4.30	4.09	0.151
AITR1392-8HG-WC-B-MH2-CTD-4	5.510	0.5050	0.1200	0.0100	NT				NT		NT
AITR1392-8HG-WC-C-MH1-CTD-1	5.507	0.5070	0.1210	0.0101	6635.66	BGM	108.166	109.067	4.25	4.29	0.161
AITR1392-8HG-WC-C-MH1-CTD-2	5.508	0.5070	0.1140	0.0095	5854.04	BGM	101.285	96.220	4.54	4.32	0.146
AITR1392-8HG-WC-C-MH1-CTD-3	5.509	0.5080	0.1200	0.0100	6406.30	BGM	105.090	105.090	4.79	4.79	GE
AITR1392-8HG-WC-C-MH1-CTD-4	5.509	0.5070	0.1210	0.0101	NT				NT		NT
AITR1392-8HG-WC-C-MH2-CTD-1	5.506	0.5090	0.1110	0.0093	6094.08	BGM	107.862	99.772	4.37	4.05	0.146
AITR1392-8HG-WC-C-MH2-CTD-2	5.507	0.5090	0.1200	0.0100	5762.49	BGB	94.343	94.343	5.14	5.14	0.152
AITR1392-8HG-WC-C-MH2-CTD-3	5.506	0.5100	0.1190	0.0099	6319.62	BGT	104.129	103.262	4.07	4.04	0.165
AITR1392-8HG-WC-C-MH2-CTD-4	5.508	0.5090	0.1190	0.0099	NT				NT		NT
Minimum	5.5060	0.5000	0.1110	0.0093	5541.06		94.343	91.076	3.731	3.762	0.1215
Maximum	5.5100	0.5100	0.1210	0.0101	7167.42		124.499	118.274	5.136	5.136	0.1767
Average	5.5078	0.5067	0.1178	0.0098	6329.37		106.417	104.108	4.399	4.304	0.1533
Standard Deviation	0.0012	0.0020	0.0031	0.0003	401.63		7.001	6.688	0.359	0.362	0.0117
Coefficient of Variation (%)	0.02	0.39	2.61	2.61	6.35		6.58	6.42	8.16	8.41	7.63
No. Specimens	24	24	24	24	18		18	18	18	18	16

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WC	MH	RTD						

Test Group: AITR1392-8HG-WC-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Compression Condition: RTD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WC-A-MH1-RTD-1	5.500	0.5066	0.1146	0.0096	4762.00	BGT	82.024	78.333	3.49	3.33	0.121
AITR1392-8HG-WC-A-MH1-RTD-2	5.500	0.5078	0.1177	0.0098	4894.00	BGT	81.883	80.314	3.72	3.65	0.134
AITR1392-8HG-WC-A-MH1-RTD-3	5.500	0.5073	0.1174	0.0098	4819.00	BGT	80.914	79.161	3.69	3.61	0.128
AITR1392-8HG-WC-A-MH1-RTD-4					NT				NT		NT
AITR1392-8HG-WC-A-MH2-RTD-1	5.500	0.5077	0.1176	0.0098	5075.00	BGB	85.001	83.301	3.62	3.55	0.131
AITR1392-8HG-WC-A-MH2-RTD-2	5.500	0.5084	0.1157	0.0096	4776.00	HGM	81.194	78.285	3.47	3.35	0.135
AITR1392-8HG-WC-A-MH2-RTD-3	5.500	0.5041	0.1098	0.0092	4304.00	BGM	77.759	71.150	4.03	3.69	0.122
AITR1392-8HG-WC-A-MH2-RTD-4					NT				NT		NT
AITR1392-8HG-WC-B-MH1-RTD-1	5.500	0.5061	0.1156	0.0096	4828.00	BGT	82.523	79.497	3.43	3.31	0.125
AITR1392-8HG-WC-B-MH1-RTD-2	5.500	0.5067	0.1193	0.0099	5094.00	BGB	84.269	83.777	3.68	3.65	0.130
AITR1392-8HG-WC-B-MH1-RTD-3	5.500	0.5064	0.1157	0.0096	4567.00	BGT	77.948	75.155	3.58	3.45	0.123
AITR1392-8HG-WC-B-MH1-RTD-4					NT				NT		NT
AITR1392-8HG-WC-B-MH2-RTD-1	5.500	0.5057	0.1184	0.0099	5305.00	BGT	88.601	87.420	3.56	3.51	0.119
AITR1392-8HG-WC-B-MH2-RTD-2	5.500	0.5084	0.1170	0.0098	5358.00	HGM	90.076	87.825	GE		GE
AITR1392-8HG-WC-B-MH2-RTD-3	5.500	0.5073	0.1213	0.0101	5275.00	BGB	85.723	86.652	3.32	3.36	0.108
AITR1392-8HG-WC-B-MH2-RTD-4					NT				NT		NT
AITR1392-8HG-WC-C-MH1-RTD-1	5.500	0.5080	0.1201	0.0100	4728.00	HGM	77.494	77.559	3.45	3.45	0.119
AITR1392-8HG-WC-C-MH1-RTD-2	5.500	0.5060	0.1189	0.0099	4609.00	BGM	76.608	75.906	3.53	3.50	0.124
AITR1392-8HG-WC-C-MH1-RTD-3	5.500	0.5060	0.1217	0.0101	5159.00	BGM	83.777	84.964	3.40	3.45	0.118
AITR1392-8HG-WC-C-MH1-RTD-4					NT				NT		NT
AITR1392-8HG-WC-C-MH2-RTD-1	5.500	0.5070	0.1214	0.0101	5346.00	BGM	86.856	87.870	3.36	3.40	0.125
AITR1392-8HG-WC-C-MH2-RTD-2	5.500	0.5070	0.1207	0.0101	5008.00	BGM	81.837	82.314	3.34	3.36	0.112
AITR1392-8HG-WC-C-MH2-RTD-3	5.500	0.5080	0.1138	0.0095	4927.00	BGB	85.227	80.823	3.79	3.59	0.120
AITR1392-8HG-WC-C-MH2-RTD-4					NT				NT		NT
Minimum	5.5000	0.5041	0.1098	0.0092	4304.00		76.608	71.150	3.319	3.309	0.1082
Maximum	5.5000	0.5084	0.1217	0.0101	5358.00		90.076	87.870	4.034	3.691	0.1350
Average	5.5000	0.5069	0.1176	0.0098	4935.22		82.762	81.128	3.556	3.483	0.1232
Standard Deviation	0.0000	0.0011	0.0031	0.0003	293.59		3.831	4.769	0.185	0.124	0.0071
Coefficient of Variation (%)	0.00	0.22	2.62	2.62	5.95		4.63	5.88	5.20	3.56	5.76
No. Specimens	18	18	18	18	18		18	18	17	17	17

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WC	MH	ETW						

Test Group: AITR1392-8HG-WC-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Compression Condition: ETW

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WC-A-MH1-ETW-1	5.511	0.5070	0.1120	0.0093	2826.00	HAT	49.768	46.450	4.37	4.08	0.130
AITR1392-8HG-WC-A-MH1-ETW-2	5.510	0.5080	0.1180	0.0098	2842.00	HGB	47.411	46.621	4.18	4.11	0.132
AITR1392-8HG-WC-A-MH1-ETW-3	5.514	0.5080	0.1180	0.0098	2401.00	BGM	40.054	39.386	3.41	3.35	0.109
AITR1392-8HG-WC-A-MH1-ETW-4	5.512	0.5070	0.1150	0.0096	NT				NT		NT
AITR1392-8HG-WC-A-MH2-ETW-1	5.512	0.5020	0.1130	0.0094	2513.00	BGM	44.301	41.716	4.32	4.07	0.124
AITR1392-8HG-WC-A-MH2-ETW-2	5.510	0.5080	0.1140	0.0095	2463.00	BGM	42.530	40.404	4.34	4.12	GE
AITR1392-8HG-WC-A-MH2-ETW-3	5.513	0.5020	0.1200	0.0100	2582.00	BGM	42.862	42.862	3.88	3.88	0.118
AITR1392-8HG-WC-A-MH2-ETW-4	5.513	0.5040	0.1220	0.0102	NT				NT		NT
AITR1392-8HG-WC-B-MH1-ETW-1	5.506	0.5070	0.1150	0.0096	2615.00	LGM	44.850	42.982	3.77	3.61	0.121
AITR1392-8HG-WC-B-MH1-ETW-2	5.511	0.5050	0.1180	0.0098	2663.00	LGM	44.689	43.944	4.09	4.02	0.125
AITR1392-8HG-WC-B-MH1-ETW-3	5.514	0.5060	0.1180	0.0098	3004.00	LGM	50.312	49.473	3.93	3.87	0.118
AITR1392-8HG-WC-B-MH1-ETW-4	5.512	0.5060	0.1160	0.0097	NT				NT		NT
AITR1392-8HG-WC-B-MH2-ETW-1	5.513	0.5060	0.1180	0.0098	2921.00	BGB	48.921	48.106	3.84	3.78	0.101
AITR1392-8HG-WC-B-MH2-ETW-2	5.511	0.5060	0.1180	0.0098	3002.00	BGT	50.278	49.440	GE		0.091
AITR1392-8HG-WC-B-MH2-ETW-3	5.510	0.5060	0.1170	0.0098	3080.00	BGT	52.025	50.725	3.82	3.72	GE
AITR1392-8HG-WC-B-MH2-ETW-4	5.512	0.5070	0.1200	0.0100	NT				NT		NT
AITR1392-8HG-WC-C-MH1-ETW-1	5.512	0.5060	0.1210	0.0101	2805.00	HGT	45.814	46.196	3.60	3.63	0.106
AITR1392-8HG-WC-C-MH1-ETW-2	5.511	0.5060	0.1150	0.0096	2490.00	HGM	42.791	41.008	3.77	3.61	0.091
AITR1392-8HG-WC-C-MH1-ETW-3	5.510	0.5070	0.1100	0.0092	2357.00	BGM	42.263	38.741	3.97	3.64	0.190
AITR1392-8HG-WC-C-MH1-ETW-4	5.511	0.5070	0.1210	0.0101	NT				NT		NT
AITR1392-8HG-WC-C-MH2-ETW-1	5.510	0.5080	0.1160	0.0097	2569.00	HGB	43.596	42.142	4.29	4.14	0.124
AITR1392-8HG-WC-C-MH2-ETW-2	5.511	0.5090	0.1170	0.0098	3052.00	HGB	51.248	49.967	3.76	3.67	0.109
AITR1392-8HG-WC-C-MH2-ETW-3	5.504	0.5060	0.1210	0.0101	2919.00	HAT	47.676	48.073	3.64	3.67	0.111
AITR1392-8HG-WC-C-MH2-ETW-4	5.510	0.5090	0.1180	0.0098	NT				NT		NT
Minimum	5.5040	0.5020	0.1100	0.0092	2357.00		40.054	38.741	3.407	3.350	0.0907
Maximum	5.5140	0.5090	0.1220	0.0102	3080.00		52.025	50.725	4.373	4.144	0.1904
Average	5.5110	0.5064	0.1171	0.0098	2728.00		46.188	44.902	3.940	3.822	0.1188
Standard Deviation	0.0022	0.0018	0.0030	0.0003	238.09		3.605	3.901	0.285	0.236	0.0228
Coefficient of Variation (%)	0.04	0.35	2.58	2.58	8.73		7.80	8.69	7.23	6.17	19.17
No. Specimens	24	24	24	24	18		18	18	17	17	16

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

WC-B-MH2-ETW-1:Modulus from 2000 to 4000

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	WC	MH	ETW2						

Test Group: AITR1392-8HG-WC-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Warp Compression Condition: ETW2

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-WC-A-MH1-ETW2-1	5.513	0.5070	0.1100	0.0092	2329.00	HGM	41.761	38.281	GE		GE
AITR1392-8HG-WC-A-MH1-ETW2-2	5.513	0.5080	0.1180	0.0098	2670.00	HGM	44.542	43.799	GE		GE
AITR1392-8HG-WC-A-MH1-ETW2-3	5.514	0.5070	0.1180	0.0098	2594.00	BGM	43.359	42.636	GE		GE
AITR1392-8HG-WC-A-MH1-ETW2-4	5.513	0.5080	0.1180	0.0098	NT				NT		NT
AITR1392-8HG-WC-A-MH2-ETW2-1	5.513	0.5080	0.1220	0.0102	NT				NT		NT
AITR1392-8HG-WC-A-MH2-ETW2-2	5.512	0.5030	0.1190	0.0099	2571.00	HGM	42.952	42.594	GE		GE
AITR1392-8HG-WC-A-MH2-ETW2-3	5.516	0.5030	0.1170	0.0098	2088.00	HGB	35.479	34.592	GE		GE
AITR1392-8HG-WC-A-MH2-ETW2-4	5.514	0.5000	0.1220	0.0102	2390.00	HGT	39.180	39.833	GE		GE
AITR1392-8HG-WC-B-MH1-ETW2-1	5.512	0.5060	0.1180	0.0098	2345.00	BGM	39.274	38.620	GE		GE
AITR1392-8HG-WC-B-MH1-ETW2-2	5.513	0.5060	0.1150	0.0096	2157.00	HGM	37.068	35.524	GE		GE
AITR1392-8HG-WC-B-MH1-ETW2-3	5.512	0.5060	0.1180	0.0098	2483.00	HGM	41.586	40.893	GE		GE
AITR1392-8HG-WC-B-MH1-ETW2-4	5.493	0.5000	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-WC-B-MH2-ETW2-1	5.510	0.5070	0.1200	0.0100	2748.00	BGM	45.168	45.168	GE		GE
AITR1392-8HG-WC-B-MH2-ETW2-2	5.514	0.5060	0.1200	0.0100	2870.00	BGM	47.266	47.266	GE		GE
AITR1392-8HG-WC-B-MH2-ETW2-3	5.514	0.5070	0.1200	0.0100	3101.00	HGM	50.970	50.970	GE		GE
AITR1392-8HG-WC-B-MH2-ETW2-4	5.512	0.5060	0.1200	0.0100	NT				NT		NT
AITR1392-8HG-WC-C-MH1-ETW2-1	5.512	0.5070	0.1150	0.0096	2161.00	BGM	37.064	35.519	GE		GE
AITR1392-8HG-WC-C-MH1-ETW2-2	5.509	0.5070	0.1210	0.0101	2362.00	HGT	38.502	38.823	GE		GE
AITR1392-8HG-WC-C-MH1-ETW2-3	5.511	0.5070	0.1140	0.0095	2340.00	HGB	40.486	38.462	GE		GE
AITR1392-8HG-WC-C-MH1-ETW2-4	5.505	0.5070	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-WC-C-MH2-ETW2-1	5.511	0.5090	0.1200	0.0100	2349.00	HGM	38.458	38.458	GE		GE
AITR1392-8HG-WC-C-MH2-ETW2-2	5.515	0.5100	0.1190	0.0099	2389.00	BGM	39.364	39.036	GE		GE
AITR1392-8HG-WC-C-MH2-ETW2-3	5.511	0.5090	0.1200	0.0100	2267.00	BGM	37.115	37.115	GE		GE
AITR1392-8HG-WC-C-MH2-ETW2-4	5.510	0.5090	0.1160	0.0097	NT				NT		NT
Minimum	5.4930	0.5000	0.1100	0.0092	2088.00		35.479	34.592			
Maximum	5.5160	0.5100	0.1220	0.0102	3101.00		50.970	50.970			
Average	5.5113	0.5064	0.1181	0.0098	2456.33		41.089	40.422			
Standard Deviation	0.0045	0.0026	0.0027	0.0002	262.35		4.038	4.306			
Coefficient of Variation (%)	0.08	0.50	2.31	2.31	10.68		9.83	10.65			
No. Specimens	24	24	24	24	18		18	18			

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FC	MH	CTD						

Test Group: AITR1392-8HG-FC-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Compression Condition: CTD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

Retest Data

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-CTD-1	5.502	0.5015	0.1261	0.0105	5630.00	BGM	89.018	93.556	3.43	3.60	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-CTD-2	5.502	0.5015	0.1261	0.0105	5709.54	BAT	90.279	94.868	3.62	3.81	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-CTD-3	5.502	0.5016	0.1261	0.0105	5668.22	BGM	89.599	94.178	3.52	3.70	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-CTD-1	5.501	0.5012	0.1274	0.0106	5605.32	BAT	87.791	93.192	3.54	3.76	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-CTD-2	5.500	0.5012	0.1276	0.0106	5839.63	BAT	91.323	97.094	3.41	3.62	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-CTD-3	5.501	0.5012	0.1276	0.0106	5807.73	BAT	90.794	96.557	3.54	3.77	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-CTD-1	5.496	0.5010	0.1207	0.0101	5578.47	BAT	92.282	92.795	3.67	3.69	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-CTD-2	5.496	0.5018	0.1205	0.0100	5278.47	BAT	87.289	87.665	3.65	3.66	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-CTD-3	5.497	0.5015	0.1213	0.0101	5835.06	BAT	95.898	96.963	3.73	3.77	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-CTD-1	5.501	0.4984	0.1199	0.0100	5089.20	BAT	85.187	85.092	3.70	3.69	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-CTD-2	5.500	0.4990	0.1203	0.0100	5533.12	BGM	92.163	92.406	3.64	3.65	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-CTD-3	5.501	0.4989	0.1202	0.0100	5082.26	BAT	84.770	84.900	3.69	3.69	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-CTD-1	5.498	0.4991	0.1215	0.0101	5444.84	BAT	89.823	90.908	3.67	3.72	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-CTD-2	5.502	0.4988	0.1214	0.0101	5750.66	BAB	94.964	96.072	3.65	3.69	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-CTD-3	5.498	0.4984	0.1212	0.0101	5376.73	BAT	89.007	89.897	3.73	3.77	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-CTD-1	5.501	0.4978	0.1220	0.0102	5212.57	BGM	85.865	87.260	3.68	3.74	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-CTD-2	5.501	0.4981	0.1225	0.0102	5248.51	BAT	85.993	87.809	3.61	3.68	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-CTD-3	5.501	0.4983	0.1223	0.0102	5501.29	BAT	90.261	92.004	3.60	3.66	
Minimum	5.4955	0.4978	0.1199	0.0100	5082.26		84.770	84.900	3.408	3.602	
Maximum	5.5020	0.5018	0.1276	0.0106	5839.63		95.898	97.094	3.735	3.806	
Average	5.4999	0.5000	0.1230	0.0103	5510.65		89.573	91.845	3.614	3.704	
Standard Deviation	0.0020	0.0015	0.0029	0.0002	248.17		3.130	3.968	0.094	0.055	
Coefficient of Variation (%)	0.04	0.30	2.33	2.33	4.50		3.49	4.32	2.61	1.49	
No. Specimens	18	18	18	18	18		18	18	18	18	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FC	MH	RTD						

Test Group: AITR1392-8HG-FC-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Compression Condition: RTD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

Retest Data

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-RTD-1	5.501	0.5013	0.1211	0.0101	4421.74	BAT	72.874	73.512	3.39	3.42	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-RTD-2	5.502	0.5013	0.1227	0.0102	4298.60	BAT	69.900	71.453	3.41	3.49	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-RTD-3	5.503	0.5015	0.1245	0.0104	4640.95	BAT	74.323	77.120	3.34	3.47	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-RTD-1	5.502	0.5013	0.1267	0.0106	4731.79	BAT	74.479	78.659	3.27	3.45	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-RTD-2	5.502	0.5013	0.1267	0.0106	4502.65	BAT	70.910	74.850	3.24	3.42	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-RTD-3	5.501	0.5010	0.1272	0.0106	4562.44	BAB	71.570	75.884	3.29	3.49	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-RTD-1	5.499	0.5014	0.1202	0.0100	3944.58	BAT	65.453	65.562	3.42	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-RTD-2	5.498	0.5016	0.1201	0.0100	4142.11	BAT	68.758	68.815	3.40	3.40	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-RTD-3	5.498	0.5014	0.1198	0.0100	4207.92	BAB	70.040	69.943	3.43	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-RTD-1	5.500	0.4987	0.1198	0.0100	4323.55	BGM	72.383	72.242	3.44	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-RTD-2	5.502	0.4990	0.1196	0.0100	4131.61	BAT	69.236	69.005	3.44	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-RTD-3	5.501	0.4990	0.1197	0.0100	3758.15	HAT	62.908	62.759	3.45	3.44	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-RTD-1	5.498	0.4992	0.1206	0.0101	3861.03	BAT	64.122	64.460	3.44	3.45	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-RTD-2	5.498	0.4987	0.1217	0.0101	3831.92	BAT	63.133	64.027	3.44	3.49	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-RTD-3	5.498	0.4989	0.1214	0.0101	3914.86	HAT	64.653	65.398	3.49	3.53	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-RTD-1	5.500	0.4981	0.1220	0.0102	4147.79	BGM	68.265	69.394	3.39	3.44	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-RTD-2	5.500	0.4977	0.1215	0.0101	4238.97	BGM	70.100	70.976	3.39	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-RTD-3	5.502	0.4980	0.1221	0.0102	4148.60	HAT	68.243	69.428	3.41	3.47	
Minimum	5.4975	0.4977	0.1196	0.0100	3758.15		62.908	62.759	3.236	3.400	
Maximum	5.5025	0.5016	0.1272	0.0106	4731.79		74.479	78.659	3.490	3.531	
Average	5.5002	0.5000	0.1221	0.0102	4211.63		68.964	70.194	3.393	3.450	
Standard Deviation	0.0017	0.0015	0.0025	0.0002	284.82		3.648	4.642	0.067	0.033	
Coefficient of Variation (%)	0.03	0.29	2.08	2.08	6.76		5.29	6.61	1.97	0.96	
No. Specimens	18	18	18	18	18		18	18	18	18	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FC	MH	ETD						

Test Group: AITR1392-8HG-FC-MH-ETD

Material: MTM45-1/GF0103-35%RW Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Compression Condition: ETD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

Retest Data

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETD-1	5.502	0.5015	0.1266	0.0106	4016.46	HAT	63.240	66.736	3.15	3.32	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETD-2	5.502	0.5014	0.1262	0.0105	3859.90	BGM	60.980	64.148	3.10	3.26	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETD-3	5.503	0.5010	0.1255	0.0105	3783.62	HGM	60.180	62.930	3.28	3.43	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETD-1	5.501	0.5014	0.1279	0.0107	3835.82	HGM	59.816	63.754	3.18	3.39	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETD-2	5.501	0.5013	0.1278	0.0106	4414.95	BGM	68.946	73.399	3.21	3.41	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETD-3	5.500	0.5011	0.1264	0.0105	4180.69	HGM	66.018	69.530	3.19	3.36	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETD-1	5.497	0.5010	0.1206	0.0100	3878.14	HAB	64.215	64.509	3.37	3.38	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETD-2	5.498	0.5011	0.1210	0.0101	3889.51	BGM	64.146	64.689	3.36	3.39	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETD-3	5.497	0.5016	0.1203	0.0100	3269.22	BGM	54.166	54.317	3.36	3.37	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETD-1	5.500	0.4987	0.1204	0.0100	3439.24	BGM	57.271	57.470	3.27	3.28	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETD-2	5.501	0.4985	0.1205	0.0100	3431.43	HGM	57.109	57.363	3.28	3.29	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETD-3	5.500	0.4988	0.1194	0.0100	3731.78	BAT	62.657	62.344	3.38	3.36	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETD-1	5.498	0.4991	0.1212	0.0101	3605.12	HGM	59.591	60.196	3.33	3.36	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETD-2	5.498	0.4993	0.1218	0.0102	3691.36	BGM	60.705	61.615	3.34	3.39	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETD-3	5.500	0.4988	0.1225	0.0102	3615.62	BGM	59.170	60.411	3.26	3.33	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETD-1	5.500	0.4981	0.1225	0.0102	3595.56	BGM	58.957	60.161	3.30	3.36	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETD-2	5.502	0.4982	0.1218	0.0101	3719.79	BGM	61.328	62.223	3.30	3.35	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETD-3	5.501	0.4980	0.1217	0.0101	3708.93	BGM	61.209	62.068	3.33	3.37	
Minimum	5.4970	0.4980	0.1194	0.0100	3269.22		54.166	54.317	3.101	3.262	
Maximum	5.5025	0.5016	0.1279	0.0107	4414.95		68.946	73.399	3.379	3.433	
Average	5.4998	0.4999	0.1230	0.0103	3759.28		61.095	62.659	3.277	3.358	
Standard Deviation	0.0017	0.0014	0.0029	0.0002	271.38		3.462	4.432	0.082	0.045	
Coefficient of Variation (%)	0.03	0.28	2.33	2.33	7.22		5.67	7.07	2.50	1.34	
No. Specimens	18	18	18	18	18		18	18	18	18	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FC	MH	ETW						

Test Group: AITR1392-8HG-FC-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Compression Condition: ETW

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

Retest Data

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW-1	5.502	0.5010	0.1268	0.0106	2795.74	HAB	44.006	46.500	3.101	3.28	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW-2	5.502	0.5012	0.1272	0.0106	2751.88	HAT	43.180	45.753	3.702	3.92	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW-3	5.503	0.5014	0.1270	0.0106	2894.49	HAT	45.448	48.105	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW-4	5.502	0.5013	0.1272	0.0106	3031.78	BGM	47.535	50.400	3.28	3.48	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW-1	5.502	0.5013	0.1260	0.0105	3043.49	HAT	48.200	50.597	3.57	3.75	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW-2	5.502	0.5010	0.1264	0.0105	3143.31	HAB	49.640	52.280	3.41	3.59	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW-3	5.502	0.5013	0.1263	0.0105	2850.33	BGM	45.007	47.382	3.35	3.53	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW-4	5.501	0.5012	0.1266	0.0105	3153.74	M(H,B)AT	49.716	52.436	3.47	3.66	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW-1	5.497	0.5017	0.1211	0.0101	2585.14	HAB	42.564	42.937	3.39	3.42	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW-2	5.497	0.5016	0.1207	0.0101	2630.08	BGM	43.443	43.696	3.36	3.38	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW-3	5.498	0.5014	0.1211	0.0101	2525.51	HAB	41.587	41.974	3.38	3.41	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW-4	5.498	0.5015	0.1214	0.0101	2881.72	M(B,H)GM	47.323	47.882	3.47	3.51	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW-1	5.501	0.4986	0.1192	0.0099	2675.11	HAB	45.028	44.715	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW-2	5.500	0.4990	0.1197	0.0100	2704.48	BGM	45.300	45.168	3.49	3.48	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW-3	5.500	0.4986	0.1202	0.0100	2782.66	HGM	46.440	46.511	3.49	3.49	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW-4	5.500	0.4988	0.1202	0.0100	2608.46	M(B,H)GM	43.509	43.576	3.35	3.36	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW-1	5.501	0.4990	0.1220	0.0102	2695.82	HAT	44.287	45.019	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW-2	5.500	0.4991	0.1224	0.0102	2474.13	HGM	40.497	41.313	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW-3	5.500	0.4990	0.1228	0.0102	2506.87	BAT	40.909	41.863	3.14	3.22	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW-4	5.500	0.4991	0.1224	0.0102	2608.06	BGM	42.704	43.546	3.39	3.45	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW2-4*	5.498	0.4990	0.1225	0.0102	2701.58	HGM	44.199	45.120	3.14	3.20	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW-1	5.501	0.4980	0.1221	0.0102	2740.74	BGM, HGM	45.089	45.866	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW-2	5.501	0.4978	0.1223	0.0102	2640.00	HGM	43.375	44.195	3.18	3.24	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW-3	5.500	0.4981	0.1211	0.0101	2479.87	BGM	41.118	41.489	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW-4	5.503	0.4984	0.1224	0.0102	2779.80	M(B,H)AT	45.564	46.476	3.38	3.45	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW2-4*	5.500	0.4984	0.1224	0.0102	2659.80	BGM	43.621	44.475	3.28	3.34	
Minimum	5.4965	0.4978	0.1192	0.0099	2474.13		40.497	41.313	3.101	3.201	
Maximum	5.5030	0.5017	0.1272	0.0106	3153.74		49.716	52.436	3.702	3.923	
Average	5.5002	0.4999	0.1230	0.0103	2744.02		44.588	45.741	3.366	3.458	
Standard Deviation	0.0018	0.0014	0.0026	0.0002	190.60		2.479	3.113	0.151	0.179	
Coefficient of Variation (%)	0.03	0.28	2.15	2.15	6.95		5.56	6.80	4.49	5.17	
No. Specimens	26	26	26	26	26		26	26	20	20	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

*Specimens were taken from ETW2 set, tested at ETW.

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FC	MH	ETW2						

Test Group: AITR1392-8HG-FC-MH-ETW2

Material: MTM45-1/GF0103-35%RW Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Fill Compression Condition: ETW2

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

Retest Data

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW2-1	5.502	0.5014	0.1273	0.0106	2510.44	HGM	39.349	41.727	NR	NR	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW2-2	5.502	0.5014	0.1267	0.0106	2556.70	BGM	40.246	42.493	2.96	3.12	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW2-3	5.502	0.5014	0.1272	0.0106	2495.59	HGM	39.143	41.476	2.89	3.07	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH1-1-ETW2-4	5.502	0.5014	0.1269	0.0106	2570.44	HGM	40.417	42.724	2.99	3.16	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW2-1	5.502	0.5012	0.1271	0.0106	2626.41	HGM	41.233	43.673	3.11	3.30	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW2-2	5.502	0.5011	0.1273	0.0106	2547.63	HGM	39.930	42.370	3.10	3.29	
NTP AITR1392-CYT-8HG-NIAR-FC-A-MH2-1-ETW2-3	5.501	0.5012	0.1272	0.0106	2826.96	HAT	44.359	47.002	2.92	3.09	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW2-1	5.496	0.5018	0.1217	0.0101	2359.39	HGM	38.639	39.181	3.08	3.12	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW2-2	5.498	0.5016	0.1215	0.0101	2411.11	BGM	39.554	40.054	3.04	3.08	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW2-3	5.497	0.5017	0.1211	0.0101	2445.92	HGM	40.269	40.627	3.03	3.06	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH1-1-ETW2-4	5.498	0.5012	0.1217	0.0101	2404.46	HAT	39.429	39.982	3.27	3.31	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW2-1	5.500	0.4984	0.1201	0.0100	2396.72	HGM	40.037	40.076	3.13	3.13	
NTP AITR1392-CYT-8HG-NIAR-FC-B-MH2-1-ETW2-2	5.500	0.4984	0.1206	0.0101	2475.77	HAT	41.188	41.399	3.13	3.15	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW2-1	5.498	0.4990	0.1227	0.0102	2299.51	BGM, HGM	37.558	38.403	3.01	3.08	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW2-2	5.505	0.4991	0.1220	0.0102	2300.21	HGM	37.791	38.405	3.00	3.04	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH1-1-ETW2-3	5.499	0.4989	0.1228	0.0102	2251.05	HGM	36.757	37.599	2.99	3.06	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW2-1	5.501	0.4983	0.1215	0.0101	2367.90	HGM	39.125	39.604	3.06	3.10	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW2-2	5.501	0.4982	0.1226	0.0102	2393.95	HGM	39.209	40.042	2.93	2.99	
NTP AITR1392-CYT-8HG-NIAR-FC-C-MH2-1-ETW2-3	5.501	0.4983	0.1217	0.0101	2210.41	BGM	36.439	36.966	3.02	3.07	
Minimum	5.4960	0.4982	0.1201	0.0100	2210.41		36.439	36.966	2.894	2.989	
Maximum	5.5045	0.5018	0.1273	0.0106	2826.96		44.359	47.002	3.266	3.311	
Average	5.5003	0.5002	0.1237	0.0103	2444.77		39.509	40.726	3.037	3.124	
Standard Deviation	0.0021	0.0015	0.0028	0.0002	145.51		1.774	2.359	0.091	0.090	
Coefficient of Variation (%)	0.04	0.29	2.23	2.23	5.95		4.49	5.79	3.01	2.89	
No. Specimens	19	19	19	19	19		19	19	18	18	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	IPS	MH	CTD				

Test Group: AITR1392-8HG-IPS-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: ±45° In Plane Shear Condition: CTD #Plies: 8

Test Method: MP1115 (ASTMD3518) Modulus/Poisson's Range: Chord 0.2% to 0.6%

ACG, Inc.
Material & Process
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Failure Mode	Shear Strength, ksi			Modulus, Msi
						0.2% Offset	@ 5% Strain	Maximum	Measured
AITR1392-8HG-IPS-A-MH1-CTD-1	10.001	1.0070	0.0780	0.0098		6.303	GE	NT	0.689
AITR1392-8HG-IPS-A-MH1-CTD-2	10.003	1.0060	0.0770	0.0096		6.509	GE	NT	0.686
AITR1392-8HG-IPS-A-MH1-CTD-3	10.004	1.0060	0.0770	0.0096		6.891	GE	NT	0.665
AITR1392-8HG-IPS-A-MH1-CTD-4	10.001	1.0070	0.0770	0.0096		7.000	GE	NT	0.647
AITR1392-8HG-IPS-A-MH2-CTD-1	10.009	1.0100	0.0797	0.0100		7.106	GE	NT	0.613
AITR1392-8HG-IPS-A-MH2-CTD-2	9.991	1.0100	0.0810	0.0101		6.156	GE	NT	0.660
AITR1392-8HG-IPS-A-MH2-CTD-3	9.985	1.0100	0.0791	0.0099		GE	GE	NT	GE
AITR1392-8HG-IPS-A-MH2-CTD-4	9.991	1.0100	0.0799	0.0100		7.647	13.981	NT	0.660
AITR1392-8HG-IPS-B-MH1-CTD-1	10.005	1.0070	0.0814	0.0102		5.345	GE	NT	0.587
AITR1392-8HG-IPS-B-MH1-CTD-2	10.006	1.0080	0.0809	0.0101		7.108	GE	NT	0.605
AITR1392-8HG-IPS-B-MH1-CTD-3	10.007	1.0070	0.0798	0.0100		8.008	13.040	NT	0.618
AITR1392-8HG-IPS-B-MH1-CTD-4	10.009	0.9960	0.0796	0.0100		8.012	GE	NT	0.648
AITR1392-8HG-IPS-B-MH2-CTD-1	10.005	1.0080	0.0819	0.0102		7.366	12.961	NT	0.657
AITR1392-8HG-IPS-B-MH2-CTD-2	10.007	1.0090	0.0799	0.0100		6.367	GE	NT	0.722
AITR1392-8HG-IPS-B-MH2-CTD-3	10.007	1.0080	0.0809	0.0101		8.172	12.130	NT	0.641
AITR1392-8HG-IPS-B-MH2-CTD-4	10.004	1.0090	0.0810	0.0101		6.794	GE	NT	0.560
AITR1392-8HG-IPS-C-MH1-CTD-1	10.006	1.0020	0.0780	0.0098		6.980	12.990	NT	0.648
AITR1392-8HG-IPS-C-MH1-CTD-2	10.004	1.0070	0.0800	0.0100		6.608	12.790	NT	0.648
AITR1392-8HG-IPS-C-MH1-CTD-3	10.003	1.0080	0.0790	0.0099		6.685	GE	NT	0.651
AITR1392-8HG-IPS-C-MH1-CTD-4	10.004	1.0060	0.0790	0.0099		7.389	12.980	NT	0.582
AITR1392-8HG-IPS-C-MH2-CTD-1	10.005	1.0040	0.0790	0.0099		6.939	13.180	NT	0.655
AITR1392-8HG-IPS-C-MH2-CTD-2	10.003	1.0080	0.0800	0.0100		7.049	13.050	NT	0.611
AITR1392-8HG-IPS-C-MH2-CTD-3	10.005	1.0070	0.0760	0.0095		6.520	13.100	NT	0.698
AITR1392-8HG-IPS-C-MH2-CTD-4	10.007	1.0070	0.0790	0.0099		6.421	12.830	NT	0.664
Minimum	9.9850	0.9960	0.0760	0.0095		5.345	12.130		0.560
Maximum	10.0090	1.0100	0.0819	0.0102		8.172	13.981		0.722
Average	10.0030	1.0070	0.0793	0.0099		6.929	13.003		0.644
Standard Deviation	0.0059	0.0030	0.0015	0.0002		0.657	0.429		0.039
Coefficient of Variation (%)	0.06	0.30	1.95	1.95		9.47	3.30		6.01
No. Specimens	24	24	24	24		23	11		23

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable
GE=Gage Error

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	IPS	MH	RTD				

Test Group: AITR1392-8HG-IPS-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: ±45° In Plane Shear Condition: RTD #Plies: 8

Test Method: MP1115 (ASTMD3518) Modulus/Poisson's Range: Chord 0.2% to 0.6%

ACG, Inc.
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Failure Mode	Shear Strength, ksi			Modulus, Msi
						0.2% Offset	@ 5% Strain	Maximum	Measured
AITR1392-8HG-IPS-A-MH1-RTD-1	10.000	1.0080	0.0770	0.0096		5.368	9.559	NT	0.562
AITR1392-8HG-IPS-A-MH1-RTD-2	10.000	1.0050	0.0790	0.0099		5.632	9.499	NT	0.512
AITR1392-8HG-IPS-A-MH1-RTD-3	10.000	1.0080	0.0790	0.0099		5.694	9.765	NT	0.518
AITR1392-8HG-IPS-A-MH1-RTD-4						NT	NA	NT	NT
AITR1392-8HG-IPS-A-MH2-RTD-1	10.000	1.0080	0.0780	0.0098		5.166	GE	NT	0.562
AITR1392-8HG-IPS-A-MH2-RTD-2	10.000	1.0080	0.0780	0.0098		5.193	GE	NT	0.489
AITR1392-8HG-IPS-A-MH2-RTD-3	10.000	1.0090	0.0770	0.0096		5.291	9.737	NT	0.525
AITR1392-8HG-IPS-A-MH2-RTD-4						NT	NA	NT	NT
AITR1392-8HG-IPS-B-MH1-RTD-1	10.000	1.0090	0.0800	0.0100		6.802	NT	NT	0.738
AITR1392-8HG-IPS-B-MH1-RTD-2	10.000	0.9950	0.0780	0.0098		5.815	9.969	NT	0.551
AITR1392-8HG-IPS-B-MH1-RTD-3	10.000	1.0080	0.0790	0.0099		5.127	9.403	NT	0.506
AITR1392-8HG-IPS-B-MH1-RTD-4						NT	NA	NT	NT
AITR1392-8HG-IPS-B-MH2-RTD-1	10.000	1.0100	0.0820	0.0103		4.770	10.834	NT	0.504
AITR1392-8HG-IPS-B-MH2-RTD-2	10.000	1.0100	0.0807	0.0101		4.822	9.230	NT	0.532
AITR1392-8HG-IPS-B-MH2-RTD-3	10.000	1.0080	0.0806	0.0101		6.042	10.480	NT	0.568
AITR1392-8HG-IPS-B-MH2-RTD-4						NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH1-RTD-1	10.000	1.0060	0.0790	0.0099		GE	GE	NT	GE
AITR1392-8HG-IPS-C-MH1-RTD-2	10.000	1.0070	0.0790	0.0099		5.272	9.739	NT	0.535
AITR1392-8HG-IPS-C-MH1-RTD-3	10.000	1.0060	0.0790	0.0099		5.399	10.379	NT	0.506
AITR1392-8HG-IPS-C-MH1-RTD-4						NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH2-RTD-1	10.000	1.0080	0.0780	0.0098		5.219	9.497	NT	0.526
AITR1392-8HG-IPS-C-MH2-RTD-2	10.000	1.0080	0.0790	0.0099		5.197	GE	NT	0.527
AITR1392-8HG-IPS-C-MH2-RTD-3	10.000	1.0060	0.0790	0.0099		4.796	9.357	NT	0.533
AITR1392-8HG-IPS-C-MH2-RTD-4						NT	NA	NT	NT
Minimum	10.0000	0.9950	0.0770	0.0096		4.770	9.230		0.489
Maximum	10.0000	1.0100	0.0820	0.0103		6.802	10.834		0.738
Average	10.0000	1.0071	0.0790	0.0099		5.389	9.804		0.541
Standard Deviation	0.0000	0.0033	0.0013	0.0002		0.504	0.485		0.055
Coefficient of Variation (%)	0.00	0.33	1.61	1.61		9.35	4.95		10.25
No. Specimens	18	18	18	18		17	13		17

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable
GE=Gage Error

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	IPS	MH	ETW				

Test Group: AITR1392-8HG-IPS-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: ±45° In Plane Shear Condition: ETW #Plies: 8

Test Method: MP1115 (ASTMD3518) Modulus/Poisson's Range: Chord 0.2% to 0.6%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Failure Mode	Shear Strength, ksi			Modulus, Msi
						0.2% Offset	@ 5% Strain	Maximum	Measured
AITR1392-8HG-IPS-A-MH1-ETW-1	10.012	1.0070	0.0780	0.0098		2.260	4.939	NT	0.357
AITR1392-8HG-IPS-A-MH1-ETW-2	10.014	1.0070	0.0800	0.0100		2.441	4.892	NT	0.346
AITR1392-8HG-IPS-A-MH1-ETW-3	10.009	1.0070	0.0780	0.0098		2.645	5.038	NT	0.336
AITR1392-8HG-IPS-A-MH1-ETW-4	10.015	1.0070	0.0780	0.0098		NT	NA	NT	NT
AITR1392-8HG-IPS-A-MH2-ETW-1	10.038	1.0100	0.0790	0.0099		3.065	5.098	NT	0.301
AITR1392-8HG-IPS-A-MH2-ETW-2	10.037	1.0100	0.0790	0.0099		2.987	5.255	NT	0.362
AITR1392-8HG-IPS-A-MH2-ETW-3	10.033	1.0100	0.0790	0.0099		3.335	5.254	NT	0.297
AITR1392-8HG-IPS-A-MH2-ETW-4	10.032	1.0100	0.0780	0.0098		NT	NA	NT	NT
AITR1392-8HG-IPS-B-MH1-ETW-1	10.014	1.0070	0.0800	0.0100		3.002	5.138	NT	0.349
AITR1392-8HG-IPS-B-MH1-ETW-2	10.017	1.0080	0.0790	0.0099		3.194	5.261	NT	0.347
AITR1392-8HG-IPS-B-MH1-ETW-3	10.017	1.0070	0.0790	0.0099		2.848	5.098	NT	0.362
AITR1392-8HG-IPS-B-MH1-ETW-4	10.015	1.0000	0.0800	0.0100		NT	NA	NT	NT
AITR1392-8HG-IPS-B-MH2-ETW-1	10.014	1.0080	0.0800	0.0100		2.749	5.170	NT	0.341
AITR1392-8HG-IPS-B-MH2-ETW-2	10.014	1.0080	0.0810	0.0101		3.055	5.520	NT	0.336
AITR1392-8HG-IPS-B-MH2-ETW-3	10.014	1.0070	0.0780	0.0098		3.264	5.835	NT	0.339
AITR1392-8HG-IPS-B-MH2-ETW-4	10.014	1.0080	0.0800	0.0100		NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH1-ETW-1	10.015	1.0080	0.0790	0.0099		2.810	5.200	NT	0.329
AITR1392-8HG-IPS-C-MH1-ETW-2	10.015	1.0080	0.0790	0.0099		3.228	5.650	NT	0.332
AITR1392-8HG-IPS-C-MH1-ETW-3	10.017	1.0080	0.0790	0.0099		3.289	5.617	NT	0.317
AITR1392-8HG-IPS-C-MH1-ETW-4	10.017	1.0080	0.0790	0.0099		NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH2-ETW-1	10.012	1.0070	0.0800	0.0100		2.579	5.352	NT	0.414
AITR1392-8HG-IPS-C-MH2-ETW-2	10.013	1.0080	0.0780	0.0098		3.279	5.687	NT	0.357
AITR1392-8HG-IPS-C-MH2-ETW-3	10.018	1.0090	0.0790	0.0099		2.946	5.401	NT	0.334
AITR1392-8HG-IPS-C-MH2-ETW-4	10.016	1.0090	0.0790	0.0099		NT	NA	NT	NT
Minimum	10.0090	1.0000	0.0780	0.0098		2.260	4.892		0.297
Maximum	10.0380	1.0100	0.0810	0.0101		3.335	5.835		0.414
Average	10.0180	1.0078	0.0791	0.0099		2.943	5.300		0.342
Standard Deviation	0.0081	0.0020	0.0008	0.0001		0.313	0.269		0.026
Coefficient of Variation (%)	0.08	0.19	1.05	1.05		10.65	5.07		7.49
No. Specimens	24	24	24	24		18	18		18

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable
GE=Gage Error

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	IPS	MH	ETW2				

Test Group: AITR1392-8HG-IPS-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: ±45° In Plane Shear Condition: ETW2 #Plies: 8

Test Method: MP1115 (ASTMD3518) Modulus/Poisson's Range: Chord 0.2% to 0.6%

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Failure Mode	Shear Strength, ksi			Modulus, Msi
						0.2% Offset	@ 5% Strain	Ultimate	Measured
AITR1392-8HG-IPS-A-MH1-ETW2-1	10.014	1.0080	0.0780	0.0098		NT	NA	NT	NT
AITR1392-8HG-IPS-A-MH1-ETW2-2	10.016	1.0080	0.0740	0.0093		2.786	GE	NT	0.295
AITR1392-8HG-IPS-A-MH1-ETW2-3	10.014	1.0090	0.0750	0.0094		3.048	4.808	NT	0.313
AITR1392-8HG-IPS-A-MH1-ETW2-4	10.015	1.0080	0.0770	0.0096		2.758	5.006	NT	0.304
AITR1392-8HG-IPS-A-MH2-ETW2-1	10.032	1.0100	0.0790	0.0099		2.438	4.270	NT	0.329
AITR1392-8HG-IPS-A-MH2-ETW2-2	10.033	1.0100	0.0790	0.0099		2.498	4.387	NT	0.338
AITR1392-8HG-IPS-A-MH2-ETW2-3	10.040	1.0100	0.0790	0.0099		NT	NA	NT	NT
AITR1392-8HG-IPS-A-MH2-ETW2-4	10.040	1.0100	0.0800	0.0100		2.364	4.388	NT	0.283
AITR1392-8HG-IPS-B-MH1-ETW2-1	10.018	1.0000	0.0810	0.0101		2.548	4.546	NT	0.351
AITR1392-8HG-IPS-B-MH1-ETW2-2	10.013	1.0080	0.0790	0.0099		2.380	5.354	NT	0.310
AITR1392-8HG-IPS-B-MH1-ETW2-3	10.011	1.0080	0.0800	0.0100		2.689	4.236	NT	0.314
AITR1392-8HG-IPS-B-MH1-ETW2-4	10.012	1.0090	0.0790	0.0099		NT	NA	NT	NT
AITR1392-8HG-IPS-B-MH2-ETW2-1	10.014	1.0080	0.0800	0.0100		2.887	4.724	NT	0.328
AITR1392-8HG-IPS-B-MH2-ETW2-2	10.013	1.0020	0.0810	0.0101		GE	N/A	NT	GE
AITR1392-8HG-IPS-B-MH2-ETW2-3	10.017	1.0070	0.0800	0.0100		2.700	4.555	NT	0.354
AITR1392-8HG-IPS-B-MH2-ETW2-4	10.010	1.0090	0.0800	0.0100		NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH1-ETW2-1	10.013	1.0060	0.0790	0.0099		2.448	5.533	NT	0.375
AITR1392-8HG-IPS-C-MH1-ETW2-2	10.013	1.0070	0.0770	0.0096		2.769	4.568	NT	0.341
AITR1392-8HG-IPS-C-MH1-ETW2-3	10.014	1.0060	0.0790	0.0099		2.518	N/A	NT	0.327
AITR1392-8HG-IPS-C-MH1-ETW2-4	10.015	1.0080	0.0800	0.0100		NT	NA	NT	NT
AITR1392-8HG-IPS-C-MH2-ETW2-1	10.016	1.0080	0.0790	0.0099		2.827	GE	NT	0.324
AITR1392-8HG-IPS-C-MH2-ETW2-2	10.017	1.0070	0.0790	0.0099		2.944	GE	NT	0.374
AITR1392-8HG-IPS-C-MH2-ETW2-3	10.018	1.0080	0.0790	0.0099		2.836	GE	NT	0.355
AITR1392-8HG-IPS-C-MH2-ETW2-4	10.015	1.0060	0.0790	0.0099		NT	NA	NT	NT
Minimum	10.0100	1.0000	0.0740	0.0093		2.364	4.236		0.283
Maximum	10.0400	1.0100	0.0810	0.0101		3.048	5.533		0.375
Average	10.0180	1.0075	0.0788	0.0099		2.673	4.698		0.330
Standard Deviation	0.0087	0.0024	0.0017	0.0002		0.209	0.414		0.026
Coefficient of Variation (%)	0.09	0.23	2.10	2.10		7.82	8.81		7.89
No. Specimens	24	24	24	24		17	12		17

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable
GE=Gage Error

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS	MH	CTD			

Test Group: AITR1392-8HG-SBS-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Short Beam Shear Condition: CTD #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS-A-MH1-CTD-1	1.500	0.2598	0.1176	0.0098	494.00	FCC/ILS	12.127	11.884
AITR1392-8HG-SBS-A-MH1-CTD-2	1.502	0.2540	0.1177	0.0098	466.00	ILS	11.691	11.467
AITR1392-8HG-SBS-A-MH1-CTD-3	1.502	0.2539	0.1165	0.0097	479.00	ILS	12.145	11.791
AITR1392-8HG-SBS-A-MH1-CTD-4	1.501	0.2540	0.1174	0.0098	463.00	ILS/FCC	11.645	11.393
AITR1392-8HG-SBS-A-MH2-CTD-1	1.501	0.2543	0.1194	0.0100	518.00	ILS	12.795	12.731
AITR1392-8HG-SBS-A-MH2-CTD-2	1.499	0.2535	0.1155	0.0096	501.00	ILS	12.833	12.352
AITR1392-8HG-SBS-A-MH2-CTD-3	1.500	0.2561	0.1189	0.0099	509.00	ILS	12.537	12.422
AITR1392-8HG-SBS-A-MH2-CTD-4	1.501	0.2543	0.1190	0.0099	NT			
AITR1392-8HG-SBS-B-MH1-CTD-1	1.499	0.2547	0.1208	0.0101	520.00	ILS/FCC	12.676	12.760
AITR1392-8HG-SBS-B-MH1-CTD-2	1.501	0.2542	0.1219	0.0102	522.00	ILS	12.634	12.834
AITR1392-8HG-SBS-B-MH1-CTD-3	1.500	0.2546	0.1220	0.0102	525.00	ILS	12.677	12.888
AITR1392-8HG-SBS-B-MH1-CTD-4	1.502	0.2540	0.1177	0.0098	NT			
AITR1392-8HG-SBS-B-MH2-CTD-1	1.498	0.2564	0.1243	0.0104	521.00	ILS	12.261	12.700
AITR1392-8HG-SBS-B-MH2-CTD-2	1.500	0.2495	0.1205	0.0100	504.00	ILS	12.573	12.625
AITR1392-8HG-SBS-B-MH2-CTD-3	1.500	0.2494	0.1225	0.0102	502.00	ILS	12.323	12.580
AITR1392-8HG-SBS-B-MH2-CTD-4	1.496	0.2566	0.1224	0.0102	NT			
AITR1392-8HG-SBS-C-MH1-CTD-1	1.500	0.2571	0.1248	0.0104	NT			
AITR1392-8HG-SBS-C-MH1-CTD-2	1.502	0.2560	0.1237	0.0103	478.00	ILS/FCC	11.321	11.670
AITR1392-8HG-SBS-C-MH1-CTD-3	1.502	0.2541	0.1208	0.0101	469.00	ILS	11.459	11.536
AITR1392-8HG-SBS-C-MH1-CTD-4	1.503	0.2543	0.1214	0.0101	NT			
AITR1392-8HG-SBS-C-MH2-CTD-1	1.493	0.2520	0.1211	0.0101	482.00	ILS	11.846	11.954
AITR1392-8HG-SBS-C-MH2-CTD-2	1.496	0.2510	0.1207	0.0101	519.00	ILS	12.848	12.923
AITR1392-8HG-SBS-C-MH2-CTD-3	1.500	0.2510	0.1229	0.0102	527.00	ILS	12.813	13.123
AITR1392-8HG-SBS-C-MH2-CTD-4	1.494	0.2510	0.1169	0.0097	NT			
Minimum	1.4930	0.2494	0.1155	0.0096	463.00		11.321	11.393
Maximum	1.5030	0.2598	0.1248	0.0104	527.00		12.848	13.123
Average	1.4997	0.2540	0.1203	0.0100	499.94		12.289	12.313
Standard Deviation	0.0026	0.0024	0.0026	0.0002	22.01		0.506	0.569
Coefficient of Variation (%)	0.17	0.96	2.16	2.16	4.40		4.11	4.62
No. Specimens	24	24	24	24	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS	MH	RTD			

Test Group: AITR1392-8HG-SBS-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Short Beam Shear Condition: RTD #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS-A-MH1-RTD-1	1.502	0.2542	0.1176	0.0098	413.00	ILS	10.362	10.154
AITR1392-8HG-SBS-A-MH1-RTD-2	1.503	0.2532	0.1180	0.0098	422.00	ILS	10.593	10.417
AITR1392-8HG-SBS-A-MH1-RTD-3	1.499	0.2544	0.1177	0.0098	418.00	ILS	10.470	10.269
AITR1392-8HG-SBS-A-MH1-RTD-4					NT			
AITR1392-8HG-SBS-A-MH2-RTD-1	1.505	0.2566	0.1136	0.0095	409.00	ILS/FCC/FTC	10.523	9.962
AITR1392-8HG-SBS-A-MH2-RTD-2	1.508	0.2566	0.1182	0.0099	428.00	ILS/FTC	10.584	10.425
AITR1392-8HG-SBS-A-MH2-RTD-3	1.502	0.2557	0.1183	0.0099	423.00	ILS/FCC/FTC	10.488	10.339
AITR1392-8HG-SBS-A-MH2-RTD-4					NT			
AITR1392-8HG-SBS-B-MH1-RTD-1	1.501	0.2562	0.1217	0.0101	433.00	ILS/FCC/FTC	10.415	10.563
AITR1392-8HG-SBS-B-MH1-RTD-2	1.501	0.2554	0.1159	0.0097	425.00	ILS/FTC	10.768	10.400
AITR1392-8HG-SBS-B-MH1-RTD-3	1.502	0.2566	0.1218	0.0102	430.00	ILS/FCC/FTC	10.319	10.473
AITR1392-8HG-SBS-B-MH1-RTD-4					NT			
AITR1392-8HG-SBS-B-MH2-RTD-1	1.502	0.2562	0.1225	0.0102	444.00	ILS/FCC	10.610	10.831
AITR1392-8HG-SBS-B-MH2-RTD-2	1.502	0.2563	0.1222	0.0102	440.00	ILS/FCC	10.536	10.730
AITR1392-8HG-SBS-B-MH2-RTD-3	1.507	0.2560	0.1206	0.0101	429.00	ILS/FCC	10.422	10.474
AITR1392-8HG-SBS-B-MH2-RTD-4					NT			
AITR1392-8HG-SBS-C-MH1-RTD-1	1.500	0.2566	0.1234	0.0103	418.00	ILS/FCC	9.901	10.181
AITR1392-8HG-SBS-C-MH1-RTD-2	1.503	0.2565	0.1234	0.0103	417.00	ILS/FCC	9.881	10.161
AITR1392-8HG-SBS-C-MH1-RTD-3	1.505	0.2560	0.1238	0.0103	421.00	ILS	9.963	10.278
AITR1392-8HG-SBS-C-MH1-RTD-4					NT			
AITR1392-8HG-SBS-C-MH2-RTD-1	1.494	0.2524	0.1237	0.0103	448.00	ILS/FCC	10.762	11.094
AITR1392-8HG-SBS-C-MH2-RTD-2	1.505	0.2516	0.1232	0.0103	443.00	ILS/FTC	10.719	11.005
AITR1392-8HG-SBS-C-MH2-RTD-3	1.497	0.2522	0.1197	0.0100	429.00	FTC/ILS	10.658	10.631
AITR1392-8HG-SBS-C-MH2-RTD-4					NT			
Minimum	1.4940	0.2516	0.1136	0.0095	409.00		9.881	9.962
Maximum	1.5080	0.2566	0.1238	0.0103	448.00		10.768	11.094
Average	1.5021	0.2552	0.1203	0.0100	427.22		10.443	10.466
Standard Deviation	0.0034	0.0017	0.0030	0.0003	11.04		0.275	0.302
Coefficient of Variation (%)	0.22	0.67	2.52	2.52	2.58		2.63	2.88
No. Specimens	18	18	18	18	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS	MH	ETD			

Test Group: AITR1392-8HG-SBS-MH-ETD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Short Beam Shear Condition: ETD #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS-A-MH1-ETD-1	1.501	0.2586	0.1179	0.0098	355.00	ILS/FCC	8.733	8.580
AITR1392-8HG-SBS-A-MH1-ETD-2	1.505	0.2542	0.1144	0.0095	323.00	FCC/ILS	8.330	7.942
AITR1392-8HG-SBS-A-MH1-ETD-3	1.501	0.2543	0.1178	0.0098	334.00	FCC/ILS	8.362	8.209
AITR1392-8HG-SBS-A-MH1-ETD-4					NT			
AITR1392-8HG-SBS-A-MH2-ETD-1	1.503	0.2545	0.1161	0.0097	328.00	ILS/FCC	8.326	8.055
AITR1392-8HG-SBS-A-MH2-ETD-2	1.502	0.2547	0.1197	0.0100	338.00	ILS/FCC	8.315	8.294
AITR1392-8HG-SBS-A-MH2-ETD-3	1.502	0.2546	0.1163	0.0097	326.00	ILS/FCC	8.257	8.003
AITR1392-8HG-SBS-A-MH2-ETD-4					NT			
AITR1392-8HG-SBS-B-MH1-ETD-1	1.501	0.2544	0.1220	0.0102	341.00	ILS/FCC	8.240	8.378
AITR1392-8HG-SBS-B-MH1-ETD-2	1.500	0.2567	0.1225	0.0102	345.00	ILS/FCC	8.228	8.400
AITR1392-8HG-SBS-B-MH1-ETD-3	1.501	0.2567	0.1221	0.0102	345.00	ILS/FCC	8.255	8.400
AITR1392-8HG-SBS-B-MH1-ETD-4					NT			
AITR1392-8HG-SBS-B-MH2-ETD-1	1.501	0.2497	0.1237	0.0103	344.00	ILS/FCC	8.353	8.610
AITR1392-8HG-SBS-B-MH2-ETD-2	1.501	0.2495	0.1224	0.0102	343.00	ILS/FCC	8.424	8.592
AITR1392-8HG-SBS-B-MH2-ETD-3	1.501	0.2498	0.1227	0.0102	353.00	FCC/ILS	8.638	8.832
AITR1392-8HG-SBS-B-MH2-ETD-4					NT			
AITR1392-8HG-SBS-C-MH1-ETD-1	1.503	0.2540	0.1229	0.0102	346.00	ILS/FCC	8.313	8.514
AITR1392-8HG-SBS-C-MH1-ETD-2	1.503	0.2559	0.1237	0.0103	348.00	ILS/FCC	8.245	8.499
AITR1392-8HG-SBS-C-MH1-ETD-3	1.503	0.2539	0.1229	0.0102	347.00	ILS/FCC	8.340	8.542
AITR1392-8HG-SBS-C-MH1-ETD-4					NT			
AITR1392-8HG-SBS-C-MH2-ETD-1	1.502	0.2509	0.1207	0.0101	350.00	FCC/ILS	8.668	8.719
AITR1392-8HG-SBS-C-MH2-ETD-2	1.506	0.2522	0.1212	0.0101	343.00	ILS/FCC	8.416	8.500
AITR1392-8HG-SBS-C-MH2-ETD-3	1.506	0.2528	0.1244	0.0104	359.00	FCC/ILS	8.562	8.876
AITR1392-8HG-SBS-C-MH2-ETD-4					NT			
Minimum	1.5000	0.2495	0.1144	0.0095	323.00		8.228	7.942
Maximum	1.5060	0.2586	0.1244	0.0104	359.00		8.733	8.876
Average	1.5023	0.2537	0.1207	0.0101	342.67		8.389	8.441
Standard Deviation	0.0018	0.0025	0.0030	0.0002	9.79		0.157	0.264
Coefficient of Variation (%)	0.12	1.00	2.48	2.48	2.86		1.87	3.13
No. Specimens	18	18	18	18	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS	MH	ETW			

Test Group: AITR1392-8HG-SBS-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Short Beam Shear Condition: ETW #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS-A-MH1-ETW-1	1.503	0.2601	0.1178	0.0098	223.00	ILS	5.459	5.359
AITR1392-8HG-SBS-A-MH1-ETW-2	1.504	0.2598	0.1178	0.0098	224.00	ILS	5.489	5.389
AITR1392-8HG-SBS-A-MH1-ETW-3	1.505	0.2601	0.1173	0.0098	225.00	ILS	5.531	5.407
AITR1392-8HG-SBS-A-MH1-ETW-4	1.506	0.2607	0.1179	0.0098	NT			
AITR1392-8HG-SBS-A-MH2-ETW-1	1.507	0.2568	0.1189	0.0099	189.00	ILS	4.642	4.600
AITR1392-8HG-SBS-A-MH2-ETW-2	1.507	0.2563	0.1204	0.0100	191.00	ILS	4.642	4.658
AITR1392-8HG-SBS-A-MH2-ETW-3	1.515	0.2555	0.1144	0.0095	179.00	ILS	4.593	4.379
AITR1392-8HG-SBS-A-MH2-ETW-4	1.507	0.2574	0.1196	0.0100	NT			
AITR1392-8HG-SBS-B-MH1-ETW-1	1.505	0.2542	0.1252	0.0104	217.00	ILS	5.114	5.335
AITR1392-8HG-SBS-B-MH1-ETW-2	1.505	0.2545	0.1249	0.0104	221.00	ILS	5.214	5.427
AITR1392-8HG-SBS-B-MH1-ETW-3	1.503	0.2538	0.1217	0.0101	191.00	ILS	4.638	4.704
AITR1392-8HG-SBS-B-MH1-ETW-4	1.502	0.2564	0.1227	0.0102	NT			
AITR1392-8HG-SBS-B-MH2-ETW-1	1.502	0.2497	0.1216	0.0101	194.00	ILS	4.792	4.856
AITR1392-8HG-SBS-B-MH2-ETW-2	1.501	0.2496	0.1238	0.0103	197.00	ILS	4.781	4.933
AITR1392-8HG-SBS-B-MH2-ETW-3	1.503	0.2496	0.1210	0.0101	191.00	ILS	4.743	4.783
AITR1392-8HG-SBS-B-MH2-ETW-4	1.503	0.2502	0.1232	0.0103	NT			
AITR1392-8HG-SBS-C-MH1-ETW-1	1.506	0.2540	0.1236	0.0103	193.00	ILS	4.611	4.749
AITR1392-8HG-SBS-C-MH1-ETW-2	1.505	0.2547	0.1238	0.0103	200.00	ILS	4.757	4.908
AITR1392-8HG-SBS-C-MH1-ETW-3	1.504	0.2552	0.1235	0.0103	196.00	ILS	4.664	4.800
AITR1392-8HG-SBS-C-MH1-ETW-4	1.506	0.2543	0.1229	0.0102	NT			
AITR1392-8HG-SBS-C-MH2-ETW-1	1.505	0.2510	0.1189	0.0099	184.00	ILS	4.624	4.582
AITR1392-8HG-SBS-C-MH2-ETW-2	1.491	0.2521	0.1229	0.0102	192.00	ILS	4.648	4.760
AITR1392-8HG-SBS-C-MH2-ETW-3	1.506	0.2515	0.1216	0.0101	188.00	ILS	4.610	4.672
AITR1392-8HG-SBS-C-MH2-ETW-4	1.509	0.2515	0.1229	0.0102	NT			
Minimum	1.4910	0.2496	0.1144	0.0095	179.00		4.593	4.379
Maximum	1.5150	0.2607	0.1252	0.0104	225.00		5.531	5.427
Average	1.5046	0.2545	0.1212	0.0101	199.72		4.864	4.905
Standard Deviation	0.0040	0.0035	0.0028	0.0002	15.02		0.335	0.330
Coefficient of Variation (%)	0.27	1.37	2.30	2.30	7.52		6.89	6.73
No. Specimens	24	24	24	24	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS	MH	ETW2			

Test Group: AITR1392-8HG-SBS-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Short Beam Shear Condition: ETW2 #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

ACG, Inc.
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS-A-MH1-ETW2-1	1.504	0.2601	0.1176	0.0098	174.00	ILS	4.266	4.181
AITR1392-8HG-SBS-A-MH1-ETW2-2	1.505	0.2603	0.1177	0.0098	177.00	ILS	4.333	4.250
AITR1392-8HG-SBS-A-MH1-ETW2-3	1.502	0.2603	0.1185	0.0099	180.00	ILS	4.377	4.322
AITR1392-8HG-SBS-A-MH1-ETW2-4	1.507	0.2601	0.1171	0.0098	NT			
AITR1392-8HG-SBS-A-MH2-ETW2-1	1.509	0.2564	0.1191	0.0099	149.00	ILS	3.659	3.632
AITR1392-8HG-SBS-A-MH2-ETW2-2	1.506	0.2568	0.1143	0.0095	142.00	ILS	3.628	3.456
AITR1392-8HG-SBS-A-MH2-ETW2-3	1.503	0.2561	0.1197	0.0100	151.00	ILS	3.694	3.685
AITR1392-8HG-SBS-A-MH2-ETW2-4	1.502	0.2560	0.1191	0.0099	NT			
AITR1392-8HG-SBS-B-MH1-ETW2-1	1.506	0.2567	0.1222	0.0102	154.00	ILS	3.682	3.750
AITR1392-8HG-SBS-B-MH1-ETW2-2	1.503	0.2560	0.1213	0.0101	153.00	ILS	3.695	3.735
AITR1392-8HG-SBS-B-MH1-ETW2-3	1.502	0.2563	0.1180	0.0098	149.00	ILS	3.695	3.633
AITR1392-8HG-SBS-B-MH1-ETW2-4	1.502	0.2567	0.1222	0.0102	NT			
AITR1392-8HG-SBS-B-MH2-ETW2-1	1.502	0.2565	0.1232	0.0103	158.00	ILS	3.750	3.850
AITR1392-8HG-SBS-B-MH2-ETW2-2	1.505	0.2560	0.1238	0.0103	163.00	ILS	3.857	3.979
AITR1392-8HG-SBS-B-MH2-ETW2-3	1.507	0.2554	0.1239	0.0103	164.00	ILS	3.887	4.013
AITR1392-8HG-SBS-B-MH2-ETW2-4	1.499	0.2561	0.1213	0.0101	NT			
AITR1392-8HG-SBS-C-MH1-ETW2-1	1.505	0.2563	0.1242	0.0104	164.00	ILS	3.864	3.999
AITR1392-8HG-SBS-C-MH1-ETW2-2	1.504	0.2563	0.1219	0.0102	160.00	ILS	3.841	3.902
AITR1392-8HG-SBS-C-MH1-ETW2-3	1.505	0.2561	0.1246	0.0104	162.00	ILS	3.808	3.954
AITR1392-8HG-SBS-C-MH1-ETW2-4	1.501	0.2561	0.1224	0.0102	NT			
AITR1392-8HG-SBS-C-MH2-ETW2-1	1.505	0.2517	0.1222	0.0102	161.00	ILS	3.926	3.998
AITR1392-8HG-SBS-C-MH2-ETW2-2	1.510	0.2507	0.1237	0.0103	155.00	ILS	3.749	3.864
AITR1392-8HG-SBS-C-MH2-ETW2-3	1.504	0.2510	0.1241	0.0103	155.00	ILS	3.732	3.860
AITR1392-8HG-SBS-C-MH2-ETW2-4	1.498	0.2517	0.1234	0.0103	NT			
Minimum	1.4980	0.2507	0.1143	0.0095	142.00		3.628	3.456
Maximum	1.5100	0.2603	0.1246	0.0104	180.00		4.377	4.322
Average	1.5040	0.2561	0.1211	0.0101	159.50		3.858	3.892
Standard Deviation	0.0028	0.0027	0.0028	0.0002	10.04		0.232	0.225
Coefficient of Variation (%)	0.19	1.04	2.32	2.32	6.29		6.00	5.78
No. Specimens	24	24	24	24	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNT1	MH	CTD						

Test Group: AITR1392-8HG-UNT1-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Tensile Condition: CTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNT1-A-MH1-CTD-1	10.008	0.9940	0.1160	0.0097	7297.00	LAT	63.285	61.175	2.81	2.72	
AITR1392-8HG-UNT1-A-MH1-CTD-2	10.004	0.9940	0.1190	0.0099	7240.00	LAT	61.208	60.698	2.93	2.91	
AITR1392-8HG-UNT1-A-MH1-CTD-3	10.003	0.9940	0.1190	0.0099	7503.00	LAT	63.431	62.902	2.98	2.96	
AITR1392-8HG-UNT1-A-MH1-CTD-4	10.006	0.9940	0.1150	0.0096	NT				NT		
AITR1392-8HG-UNT1-A-MH2-CTD-1	10.006	1.0080	0.1180	0.0098	7498.00	LAT	63.038	61.987	3.11	3.06	
AITR1392-8HG-UNT1-A-MH2-CTD-2	10.001	1.0080	0.1160	0.0097	7632.00	LAT	65.271	63.095	3.18	3.07	
AITR1392-8HG-UNT1-A-MH2-CTD-3	10.002	1.0080	0.1170	0.0098	7494.00	LAT	63.543	61.954	3.14	3.06	
AITR1392-8HG-UNT1-A-MH2-CTD-4	10.001	1.0080	0.1170	0.0098	NT				NT		
AITR1392-8HG-UNT1-B-MH1-CTD-1	10.002	1.0000	0.1190	0.0099	7596.00	LAT	63.832	63.300	3.02	2.99	
AITR1392-8HG-UNT1-B-MH1-CTD-2	10.006	1.0050	0.1200	0.0100	7760.00	LAT	64.345	64.345	3.02	3.02	
AITR1392-8HG-UNT1-B-MH1-CTD-3	10.005	1.0000	0.1210	0.0101	7646.00	LAT	63.190	63.717	2.96	2.98	
AITR1392-8HG-UNT1-B-MH1-CTD-4	10.006	1.0050	0.1200	0.0100	NT				NT		
AITR1392-8HG-UNT1-B-MH2-CTD-1	10.005	1.0050	0.1190	0.0099	7747.00	LAT	64.777	64.237	3.04	3.02	
AITR1392-8HG-UNT1-B-MH2-CTD-2	10.009	1.0050	0.1190	0.0099	7466.00	LWT	62.427	61.907	3.05	3.03	
AITR1392-8HG-UNT1-B-MH2-CTD-3	10.005	1.0040	0.1190	0.0099	7660.00	LAT	64.113	63.579	3.01	2.99	
AITR1392-8HG-UNT1-B-MH2-CTD-4	10.004	1.0000	0.1180	0.0098	NT				NT		
AITR1392-8HG-UNT1-C-MH1-CTD-1	10.005	1.0050	0.1100	0.0092	7581.00	LAT	68.575	62.861	3.18	2.92	
AITR1392-8HG-UNT1-C-MH1-CTD-2	10.006	1.0050	0.1190	0.0099	7438.00	LWT	62.193	61.675	2.97	2.94	
AITR1392-8HG-UNT1-C-MH1-CTD-3	10.006	1.0050	0.1170	0.0098	7503.00	LWT	63.809	62.214	3.10	3.03	
AITR1392-8HG-UNT1-C-MH1-CTD-4	10.002	1.0050	0.1210	0.0101	NT				NT		
AITR1392-8HG-UNT1-C-MH2-CTD-1	10.009	1.0050	0.1190	0.0099	7405.00	LWT	61.917	61.401	2.97	2.95	
AITR1392-8HG-UNT1-C-MH2-CTD-2	10.005	1.0050	0.1200	0.0100	7557.00	LWT	62.662	62.662	2.93	2.93	
AITR1392-8HG-UNT1-C-MH2-CTD-3	10.004	1.0050	0.1210	0.0101	7762.00	LWT	63.830	64.362	3.00	3.03	
AITR1392-8HG-UNT1-C-MH2-CTD-4	10.001	1.0050	0.1210	0.0101	NT				NT		
Minimum	10.0010	0.9940	0.1100	0.0092	7240.00		61.208	60.698	2.809	2.716	
Maximum	10.0090	1.0080	0.1210	0.0101	7762.00		68.575	64.362	3.180	3.071	
Average	10.0046	1.0030	0.1183	0.0099	7543.61		63.636	62.671	3.023	2.977	
Standard Deviation	0.0023	0.0047	0.0024	0.0002	147.38		1.596	1.117	0.094	0.082	
Coefficient of Variation (%)	0.02	0.46	2.06	2.06	1.95		2.51	1.78	3.13	2.77	
No. Specimens	24	24	24	24	18		18	18	18	18	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNT1	MH	RTD						

Test Group: AITR1392-8HG-UNT1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Tensile Condition: RTD

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNT1-A-MH1-RTD-1	10.000	0.9950	0.1190	0.0099	6047.33	LAT	51.073	50.648	2.88	2.86	
AITR1392-8HG-UNT1-A-MH1-RTD-2	10.000	0.9920	0.1190	0.0099	6379.16	LAB	54.039	53.588	2.81	2.79	
AITR1392-8HG-UNT1-A-MH1-RTD-3	10.000	0.9900	0.1190	0.0099	5996.06	LAT	50.896	50.472	GE		
AITR1392-8HG-UNT1-A-MH1-RTD-4					NT				NT		
AITR1392-8HG-UNT1-A-MH2-RTD-1	10.000	1.0080	0.1180	0.0098	6566.39	LGM	55.206	54.286	GE		
AITR1392-8HG-UNT1-A-MH2-RTD-2	10.000	1.0090	0.1140	0.0095	6719.44	LGM	58.417	55.496	3.33	3.16	
AITR1392-8HG-UNT1-A-MH2-RTD-3	10.000	1.0060	0.1190	0.0099	6677.91	LAT	55.782	55.317	GE		
AITR1392-8HG-UNT1-A-MH2-RTD-4					NT				NT		
AITR1392-8HG-UNT1-B-MH1-RTD-1	10.000	1.0060	0.1180	0.0098	6465.39	LGM	54.465	53.557	2.83	2.78	
AITR1392-8HG-UNT1-B-MH1-RTD-2	10.000	1.0050	0.1170	0.0098	6391.24	LGM	54.354	52.995	2.93	2.86	
AITR1392-8HG-UNT1-B-MH1-RTD-3	10.000	1.0060	0.1210	0.0101	6257.78	LAT	51.409	51.837	GE		
AITR1392-8HG-UNT1-B-MH1-RTD-4					NT				NT		
AITR1392-8HG-UNT1-B-MH2-RTD-1	10.000	1.0050	0.1160	0.0097	6478.54	LAB	55.572	53.719	3.11	3.01	
AITR1392-8HG-UNT1-B-MH2-RTD-2	10.000	1.0050	0.1180	0.0098	6319.53	LGM	53.289	52.401	3.34	3.28	
AITR1392-8HG-UNT1-B-MH2-RTD-3	10.000	1.0000	0.1190	0.0099	6453.18	LGM	54.228	53.777	2.91	2.89	
AITR1392-8HG-UNT1-B-MH2-RTD-4					NT				NT		
AITR1392-8HG-UNT1-C-MH1-RTD-1	10.000	0.9990	0.1180	0.0098	6248.42	LGT	53.006	52.122	2.67	2.62	
AITR1392-8HG-UNT1-C-MH1-RTD-2	10.000	1.0040	0.1190	0.0099	6275.88	LAT	52.528	52.091	2.92	2.89	
AITR1392-8HG-UNT1-C-MH1-RTD-3	10.000	1.0040	0.1200	0.0100	6561.61	LGB	54.462	54.462	2.73	2.73	
AITR1392-8HG-UNT1-C-MH1-RTD-4					NT				NT		
AITR1392-8HG-UNT1-C-MH2-RTD-1	10.000	1.0050	0.1170	0.0098	6458.15	LGT	54.923	53.550	2.89	2.82	
AITR1392-8HG-UNT1-C-MH2-RTD-2	10.000	1.0050	0.1140	0.0095	6562.95	LGT	57.283	54.419	2.80	2.66	
AITR1392-8HG-UNT1-C-MH2-RTD-3	10.000	1.0050	0.1220	0.0102	6569.93	LGT	53.584	54.477	2.69	2.73	
AITR1392-8HG-UNT1-C-MH2-RTD-4					NT				NT		
Minimum	10.0000	0.9900	0.1140	0.0095	5996.06		50.896	50.472	2.666	2.622	
Maximum	10.0000	1.0090	0.1220	0.0102	6719.44		58.417	55.496	3.340	3.284	
Average	10.0000	1.0027	0.1182	0.0098	6412.72		54.140	53.290	2.917	2.863	
Standard Deviation	0.0000	0.0054	0.0021	0.0002	196.35		1.989	1.443	0.210	0.184	
Coefficient of Variation (%)	0.00	0.54	1.75	1.75	3.06		3.67	2.71	7.19	6.41	
No. Specimens	18	18	18	18	18		18	18	14	14	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNT1	MH	ETW2						

Test Group: AITR1392-8HG-UNT1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Tensile Condition: ETW2

Test Method: MP1112 (ASTMD3039) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNT1-A-MH1-ETW2-1	10.016	0.9930	0.1120	0.0093	3924.00	LGM	35.283	32.931	2.80	2.61	
AITR1392-8HG-UNT1-A-MH1-ETW2-2	10.013	0.9940	0.1170	0.0098	3963.00	LGT	34.076	33.224	3.04	2.96	
AITR1392-8HG-UNT1-A-MH1-ETW2-3	10.016	0.9940	0.1180	0.0098	3980.00	LGM	33.932	33.367	2.75	2.71	
AITR1392-8HG-UNT1-A-MH1-ETW2-4	10.018	0.9930	0.1170	0.0098	NT				NT		
AITR1392-8HG-UNT1-A-MH2-ETW2-1	10.012	1.0090	0.1180	0.0098	3830.00	LAT	32.168	31.632	2.82	2.78	
AITR1392-8HG-UNT1-A-MH2-ETW2-2	10.012	1.0100	0.1160	0.0097	3766.00	LAT	32.144	31.073	GE		
AITR1392-8HG-UNT1-A-MH2-ETW2-3	10.012	1.0090	0.1190	0.0099	3885.00	LGT	32.356	32.086	2.91	2.89	
AITR1392-8HG-UNT1-A-MH2-ETW2-4	10.010	1.0090	0.1180	0.0098	3951.00	LAB	33.184	32.631	2.32	2.28	
Minimum	10.0100	0.9930	0.1120	0.0093	3766.00		32.144	31.073	2.323	2.284	
Maximum	10.0180	1.0100	0.1190	0.0099	3980.00		35.283	33.367	3.036	2.960	
Average	10.0136	1.0014	0.1169	0.0097	3899.86		33.306	32.421	2.774	2.704	
Standard Deviation	0.0027	0.0084	0.0022	0.0002	78.13		1.187	0.856	0.243	0.241	
Coefficient of Variation (%)	0.03	0.84	1.85	1.85	2.00		3.56	2.64	8.74	8.90	
No. Specimens	8	8	8	8	7		7	7	6	6	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNC1	MH	RTD						

Test Group: AITR1392-8HG-UNC1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Compression Condition: RTD

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNC1-A-MH1-RTD-1	5.508	0.5060	0.1160	0.0097	3775.93	BGM	64.330	62.186	3.00	2.90	0.309
AITR1392-8HG-UNC1-A-MH1-RTD-2	5.509	0.5050	0.1160	0.0097	3799.13	BGM	64.854	62.692	3.04	2.94	0.304
AITR1392-8HG-UNC1-A-MH1-RTD-3	5.506	0.5060	0.1150	0.0096	3635.03	BGM	62.468	59.865	2.91	2.79	0.304
AITR1392-8HG-UNC1-A-MH1-RTD-4	5.509	0.5050	0.1140	0.0095	NT				NT		NT
AITR1392-8HG-UNC1-A-MH2-RTD-1	5.509	0.5060	0.1160	0.0097	3767.82	BGM	64.192	62.052	3.30	3.19	0.366
AITR1392-8HG-UNC1-A-MH2-RTD-2	5.509	0.5050	0.1160	0.0097	3620.37	BGM	61.802	59.742	3.31	3.20	0.271
AITR1392-8HG-UNC1-A-MH2-RTD-3	5.509	0.5070	0.1190	0.0099	3796.79	BGB	62.931	62.406	2.95	2.92	0.279
AITR1392-8HG-UNC1-A-MH2-RTD-4	5.509	0.5070	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-B-MH1-RTD-1	5.505	0.5070	0.1160	0.0097	4116.21	BGT	69.989	67.656	3.21	3.10	0.314
AITR1392-8HG-UNC1-B-MH1-RTD-2	5.507	0.5080	0.1170	0.0098	4207.35	BGB	70.788	69.018	3.07	2.99	0.313
AITR1392-8HG-UNC1-B-MH1-RTD-3	5.505	0.5080	0.1180	0.0098	4369.69	BGM	72.896	71.681	3.28	3.23	0.310
AITR1392-8HG-UNC1-B-MH1-RTD-4	5.504	0.5080	0.1180	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-B-MH2-RTD-1	5.505	0.5060	0.1190	0.0099	4244.72	BGB	70.494	69.906	3.13	3.11	0.331
AITR1392-8HG-UNC1-B-MH2-RTD-2	5.505	0.5060	0.1160	0.0097	4344.14	BGM	74.011	71.544	4.13	3.99	0.221
AITR1392-8HG-UNC1-B-MH2-RTD-3	5.507	0.5060	0.1130	0.0094	3845.85	BGM	67.261	63.337	3.19	3.00	0.324
AITR1392-8HG-UNC1-B-MH2-RTD-4	5.507	0.5060	0.1170	0.0098	4055.78	BGM	68.507	66.795	3.08	3.00	0.311
AITR1392-8HG-UNC1-C-MH1-RTD-1	5.505	0.5070	0.1170	0.0098	4032.48	BGM	67.980	66.280	3.35	3.26	0.312
AITR1392-8HG-UNC1-C-MH1-RTD-2	5.507	0.5070	0.1150	0.0096	4103.65	BGM	70.383	67.450	3.12	2.99	0.322
AITR1392-8HG-UNC1-C-MH1-RTD-3	5.507	0.5070	0.1180	0.0098	4137.62	BGM	69.161	68.008	2.97	2.92	0.327
AITR1392-8HG-UNC1-C-MH1-RTD-4	5.505	0.5070	0.1200	0.0100	NT				NT		NT
AITR1392-8HG-UNC1-C-MH2-RTD-1	5.500	0.5030	0.1170	0.0098	4152.03	BGM	70.552	68.788	2.91	2.84	0.273
AITR1392-8HG-UNC1-C-MH2-RTD-2	5.498	0.5030	0.1150	0.0096	4073.46	BGB	70.420	67.486	3.20	3.06	0.318
AITR1392-8HG-UNC1-C-MH2-RTD-3	5.500	0.5030	0.1150	0.0096	3801.42	BGM	65.717	62.979	3.05	2.92	0.312
AITR1392-8HG-UNC1-C-MH2-RTD-4	5.496	0.5020	0.1170	0.0098	NT				NT		NT
Minimum	5.4960	0.5020	0.1130	0.0094	3620.37		61.802	59.742	2.907	2.786	0.2208
Maximum	5.5090	0.5080	0.1200	0.0100	4369.69		74.011	71.681	4.130	3.992	0.3663
Average	5.5055	0.5059	0.1165	0.0097	3993.66		67.828	65.783	3.168	3.071	0.3065
Standard Deviation	0.0036	0.0017	0.0016	0.0001	230.86		3.617	3.749	0.270	0.260	0.0298
Coefficient of Variation (%)	0.07	0.33	1.41	1.41	5.78		5.33	5.70	8.53	8.47	9.73
No. Specimens	24	24	24	24	19		19	19	19	19	19

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNC1	MH	ETW						

Test Group: AITR1392-8HG-UNC1-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Compression Condition: ETW

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNC1-A-MH1-ETW-1	5.513	0.5050	0.1130	0.0094	1964.00	BGM	34.417	32.409	3.55	3.34	0.316
AITR1392-8HG-UNC1-A-MH1-ETW-2	5.510	0.5050	0.1170	0.0098	2052.00	BGM	34.730	33.861	3.02	2.95	0.336
AITR1392-8HG-UNC1-A-MH1-ETW-3	5.510	0.5050	0.1170	0.0098	1982.00	HGM	33.545	32.706	2.71	2.65	0.250
AITR1392-8HG-UNC1-A-MH1-ETW-4	5.508	0.5050	0.1100	0.0092	NT				NT		NT
AITR1392-8HG-UNC1-A-MH2-ETW-1	5.511	0.5070	0.1150	0.0096	2402.00	HGM	41.197	39.481	3.18	3.05	0.252
AITR1392-8HG-UNC1-A-MH2-ETW-2	5.511	0.5060	0.1170	0.0098	2257.00	HGM	38.124	37.171	3.18	3.10	0.371
AITR1392-8HG-UNC1-A-MH2-ETW-3	5.514	0.5060	0.1190	0.0099	2274.00	HGM	37.765	37.451	2.79	2.77	0.273
AITR1392-8HG-UNC1-A-MH2-ETW-4	5.512	0.5060	0.1160	0.0097	NT				NT		NT
Minimum	5.5080	0.5050	0.1100	0.0092	1964.00		33.545	32.409	2.713	2.645	0.2501
Maximum	5.5140	0.5070	0.1190	0.0099	2402.00		41.197	39.481	3.547	3.340	0.3714
Average	5.5111	0.5056	0.1155	0.0096	2155.17		36.630	35.513	3.071	2.974	0.2999
Standard Deviation	0.0019	0.0007	0.0028	0.0002	180.33		2.912	2.915	0.303	0.247	0.0492
Coefficient of Variation (%)	0.03	0.15	2.45	2.45	8.37		7.95	8.21	9.86	8.31	16.41
No. Specimens	8	8	8	8	6		6	6	6	6	6

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	UNC1	MH	ETW2						

Test Group: AITR1392-8HG-UNC1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01 #Plies: 12

Test Type: Quasi Unnotched Compression Condition: ETW2

Test Method: MP1114 (ASTMD6641) Modulus/Poisson's Range: Chord 0.1% to 0.3%

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-8HG-UNC1-A-MH1-ETW2-1	5.508	0.5050	0.1130	0.0094	1707.00	BGM	29.913	28.168	4.31	4.06	0.407
AITR1392-8HG-UNC1-A-MH1-ETW2-2	5.509	0.5050	0.1160	0.0097	1683.00	AGM	28.730	27.772	GE		GE
AITR1392-8HG-UNC1-A-MH1-ETW2-3	5.509	0.5050	0.1150	0.0096	1882.00	BGM	32.406	31.056	3.47	3.33	0.372
AITR1392-8HG-UNC1-A-MH1-ETW2-4	5.509	0.5050	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-A-MH2-ETW2-1	5.510	0.5070	0.1130	0.0094	1612.00	HGM	28.137	26.496	4.48	4.22	0.396
AITR1392-8HG-UNC1-A-MH2-ETW2-2	5.512	0.5070	0.1140	0.0095	1893.00	HAM	32.752	31.114	4.13	3.93	0.323
AITR1392-8HG-UNC1-A-MH2-ETW2-3	5.515	0.5070	0.1140	0.0095	1881.00	HAM	32.544	30.917	4.25	4.04	0.354
AITR1392-8HG-UNC1-A-MH2-ETW2-4	5.515	0.5070	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-B-MH1-ETW2-1	5.512	0.5090	0.1160	0.0097	2299.00	HGM	38.937	37.639	4.36	4.21	0.441
AITR1392-8HG-UNC1-B-MH1-ETW2-2	5.508	0.5060	0.1200	0.0100	2337.00	HAM	38.488	38.488	3.91	3.91	0.433
AITR1392-8HG-UNC1-B-MH1-ETW2-3	5.510	0.5070	0.1170	0.0098	2161.00	HAM	36.430	35.519	GE		GE
AITR1392-8HG-UNC1-B-MH1-ETW2-4	5.509	0.5080	0.1120	0.0093	NT				NT		NT
AITR1392-8HG-UNC1-B-MH2-ETW2-1	5.510	0.5070	0.1170	0.0098	2128.00	HAM	35.874	34.977	GE		GE
AITR1392-8HG-UNC1-B-MH2-ETW2-2	5.510	0.5070	0.1160	0.0097	2261.00	HAM	38.445	37.163	4.45	4.31	0.488
AITR1392-8HG-UNC1-B-MH2-ETW2-3	5.509	0.5070	0.1150	0.0096	1991.00	HAT	34.148	32.725	4.10	3.93	0.422
AITR1392-8HG-UNC1-B-MH2-ETW2-4	5.510	0.5070	0.1180	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-C-MH1-ETW2-1	5.509	0.5070	0.1110	0.0093	1888.00	HGT	33.548	31.032	4.69	4.33	0.427
AITR1392-8HG-UNC1-C-MH1-ETW2-2	5.509	0.5070	0.1180	0.0098	2168.00	BGM	36.238	35.634	4.47	4.39	0.450
AITR1392-8HG-UNC1-C-MH1-ETW2-3	5.509	0.5070	0.1120	0.0093	1995.00	HAB	35.133	32.791	3.97	3.71	0.406
AITR1392-8HG-UNC1-C-MH1-ETW2-4	5.509	0.5060	0.1170	0.0098	NT				NT		NT
AITR1392-8HG-UNC1-C-MH2-ETW2-1	5.501	0.5030	0.1160	0.0097	1852.00	BGM	31.741	30.683	4.18	4.04	0.459
AITR1392-8HG-UNC1-C-MH2-ETW2-2	5.501	0.5030	0.1170	0.0098	2060.00	BAT	35.004	34.129	4.39	4.28	0.465
AITR1392-8HG-UNC1-C-MH2-ETW2-3	5.501	0.5030	0.1180	0.0098	2022.00	HAB	34.067	33.499	4.02	3.95	0.370
AITR1392-8HG-UNC1-C-MH2-ETW2-4	5.500	0.5030	0.1160	0.0097	NT				NT		NT
Minimum	5.5000	0.5030	0.1110	0.0093	1612.00		28.137	26.496	3.470	3.325	0.3233
Maximum	5.5150	0.5090	0.1200	0.0100	2337.00		38.937	38.488	4.686	4.393	0.4877
Average	5.5085	0.5060	0.1156	0.0096	1990.00		34.030	32.767	4.211	4.042	0.4141
Standard Deviation	0.0040	0.0017	0.0022	0.0002	210.72		3.175	3.436	0.297	0.276	0.0452
Coefficient of Variation (%)	0.07	0.33	1.94	1.94	10.59		9.33	10.49	7.06	6.84	10.91
No. Specimens	24	24	24	24	18		18	18	15	15	15

Notes:

NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable

A-MH1-ETW2-3 modulus from 1700 to 3700, C-MH2-ETW2-3 modulus from 2000 to 4000

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS1	MH	RTD			

Test Group: AITR1392-8HG-SBS1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Quasi Short Beam Shear Condition: RTD #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.47

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS1-A-MH1-RTD-1	1.502	0.2580	0.1188	0.0099	429.00	FCC	10.497	10.392
AITR1392-8HG-SBS1-A-MH1-RTD-2	1.506	0.2580	0.1187	0.0099	415.00	FCC	10.163	10.053
AITR1392-8HG-SBS1-A-MH1-RTD-3	1.508	0.2576	0.1187	0.0099	424.00	FTC	10.400	10.287
AITR1392-8HG-SBS1-A-MH1-RTD-4					NT			
AITR1392-8HG-SBS1-A-MH2-RTD-1	1.503	0.2583	0.1168	0.0097	388.00	ILS	9.646	9.388
AITR1392-8HG-SBS1-A-MH2-RTD-2	1.508	0.2578	0.1161	0.0097	386.00	ILS	9.672	9.358
AITR1392-8HG-SBS1-A-MH2-RTD-3	1.501	0.2581	0.1155	0.0096	382.00	ILS	9.611	9.250
AITR1392-8HG-SBS1-A-MH2-RTD-4					NT			
AITR1392-8HG-SBS1-B-MH1-RTD-1	1.583	0.2558	0.1205	0.0100	378.00	ILS	9.197	9.236
AITR1392-8HG-SBS1-B-MH1-RTD-2	1.588	0.2567	0.1210	0.0101	387.00	ILS	9.345	9.422
AITR1392-8HG-SBS1-B-MH1-RTD-3	1.582	0.2556	0.1196	0.0100	376.00	ILS	9.225	9.194
AITR1392-8HG-SBS1-B-MH1-RTD-4					NT			
AITR1392-8HG-SBS1-B-MH2-RTD-1	1.574	0.2560	0.1103	0.0092	349.00	ILS	9.270	8.521
AITR1392-8HG-SBS1-B-MH2-RTD-2	1.583	0.2560	0.1139	0.0095	356.00	ILS	9.157	8.691
AITR1392-8HG-SBS1-B-MH2-RTD-3	1.586	0.2563	0.1144	0.0095	363.00	ILS	9.285	8.852
AITR1392-8HG-SBS1-B-MH2-RTD-4					NT			
AITR1392-8HG-SBS1-C-MH1-RTD-1	1.584	0.2538	0.1159	0.0097	366.00	FTC/ILS	9.332	9.013
AITR1392-8HG-SBS1-C-MH1-RTD-2	1.589	0.2538	0.1166	0.0097	364.00	FTC/ILS	9.225	8.964
AITR1392-8HG-SBS1-C-MH1-RTD-3	1.590	0.2523	0.1162	0.0097	363.00	ILS	9.286	8.992
AITR1392-8HG-SBS1-C-MH1-RTD-4					NT			
AITR1392-8HG-SBS1-C-MH2-RTD-1	1.510	0.2590	0.1150	0.0096	379.00	FTC	9.543	9.146
AITR1392-8HG-SBS1-C-MH2-RTD-2	1.508	0.2590	0.1190	0.0099	401.00	ILS	9.758	9.677
AITR1392-8HG-SBS1-C-MH2-RTD-3	1.495	0.2590	0.1180	0.0098	397.00	ILS	9.742	9.580
AITR1392-8HG-SBS1-C-MH2-RTD-4					NT			
Minimum	1.4950	0.2523	0.1103	0.0092	349.00		9.157	8.521
Maximum	1.5900	0.2590	0.1210	0.0101	429.00		10.497	10.392
Average	1.5444	0.2567	0.1169	0.0097	383.50		9.575	9.334
Standard Deviation	0.0413	0.0020	0.0026	0.0002	22.77		0.412	0.513
Coefficient of Variation (%)	2.67	0.76	2.27	2.27	5.94		4.31	5.49
No. Specimens	18	18	18	18	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS1	MH	ETW			

Test Group: AITR1392-8HG-SBS1-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Quasi Short Beam Shear Condition: ETW #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.48

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS1-A-MH1-ETW-1	1.508	0.2520	0.1197	0.0100	247.00	FTC	6.141	6.126
AITR1392-8HG-SBS1-A-MH1-ETW-2	1.509	0.2524	0.1211	0.0101	258.00	FTC	6.331	6.389
AITR1392-8HG-SBS1-A-MH1-ETW-3	1.508	0.2529	0.1190	0.0099	247.00	FTC	6.155	6.104
AITR1392-8HG-SBS1-A-MH1-ETW-4	1.509	0.2518	0.1191	0.0099	NT			
AITR1392-8HG-SBS1-A-MH2-ETW-1	1.496	0.2509	0.1183	0.0099	220.00	ILS	5.559	5.480
AITR1392-8HG-SBS1-A-MH2-ETW-2	1.508	0.2506	0.1214	0.0101	221.00	ILS	5.448	5.512
AITR1392-8HG-SBS1-A-MH2-ETW-3	1.511	0.2516	0.1202	0.0100	216.00	ILS	5.357	5.366
AITR1392-8HG-SBS1-A-MH2-ETW-4	1.497	0.2513	0.1218	0.0102	NT			
Minimum	1.4960	0.2506	0.1183	0.0099	216.00		5.357	5.366
Maximum	1.5110	0.2529	0.1218	0.0102	258.00		6.331	6.389
Average	1.5058	0.2517	0.1201	0.0100	234.83		5.832	5.829
Standard Deviation	0.0058	0.0008	0.0013	0.0001	17.88		0.423	0.428
Coefficient of Variation (%)	0.39	0.30	1.05	1.05	7.61		7.26	7.33
No. Specimens	8	8	8	8	6		6	6

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	8HG	SBS1	MH	ETW2			

Test Group: AITR1392-8HG-SBS1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: Cured Ply Thickness: 0.01

Test Type: Quasi Short Beam Shear Condition: ETW2 #Plies: 12

Test Method: MP1116 (ASTMD2344) Span (4t): 0.47

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Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-8HG-SBS1-A-MH1-ETW2-1	1.506	0.2531	0.1195	0.0100	200.90	FTC	4.982	4.961
AITR1392-8HG-SBS1-A-MH1-ETW2-2	1.505	0.2508	0.1201	0.0100	205.00	FTC	5.104	5.109
AITR1392-8HG-SBS1-A-MH1-ETW2-3	1.507	0.2516	0.1202	0.0100	205.80	FTC	5.104	5.112
AITR1392-8HG-SBS1-A-MH1-ETW2-4					NT			
AITR1392-8HG-SBS1-A-MH2-ETW2-1	1.509	0.2518	0.1188	0.0099	180.00	ILS	4.513	4.468
AITR1392-8HG-SBS1-A-MH2-ETW2-2					NT			
AITR1392-8HG-SBS1-A-MH2-ETW2-3	1.501	0.2519	0.1193	0.0099	176.20	ILS	4.397	4.372
AITR1392-8HG-SBS1-A-MH2-ETW2-4	1.501	0.2513	0.1179	0.0098	172.50	ILS	4.367	4.290
AITR1392-8HG-SBS1-B-MH1-ETW2-1	1.587	0.2565	0.1203	0.0100	189.50	ILS	4.606	4.617
AITR1392-8HG-SBS1-B-MH1-ETW2-2	1.589	0.2563	0.1206	0.0101	186.20	ILS	4.518	4.541
AITR1392-8HG-SBS1-B-MH1-ETW2-3	1.585	0.2562	0.1197	0.0100	182.10	ILS	4.453	4.442
AITR1392-8HG-SBS1-B-MH1-ETW2-4					NT			
AITR1392-8HG-SBS1-B-MH2-ETW2-1	1.566	0.2568	0.1088	0.0091	161.50	ILS	4.335	3.931
AITR1392-8HG-SBS1-B-MH2-ETW2-2	1.585	0.2562	0.1151	0.0096	170.30	ILS	4.331	4.154
AITR1392-8HG-SBS1-B-MH2-ETW2-3	1.584	0.2554	0.1160	0.0097	174.60	ILS	4.420	4.273
AITR1392-8HG-SBS1-B-MH2-ETW2-4					NT			
AITR1392-8HG-SBS1-C-MH1-ETW2-1	1.590	0.2541	0.1145	0.0095	180.70	ILS	4.658	4.445
AITR1392-8HG-SBS1-C-MH1-ETW2-2	1.586	0.2541	0.1168	0.0097	183.50	ILS	4.637	4.513
AITR1392-8HG-SBS1-C-MH1-ETW2-3	1.586	0.2535	0.1148	0.0096	177.90	ILS	4.585	4.386
AITR1392-8HG-SBS1-C-MH1-ETW2-4					NT			
AITR1392-8HG-SBS1-C-MH2-ETW2-1	1.583	0.2561	0.1183	0.0099	187.10	ILS	4.632	4.566
AITR1392-8HG-SBS1-C-MH2-ETW2-2	1.585	0.2564	0.1178	0.0098	189.20	ILS	4.698	4.612
AITR1392-8HG-SBS1-C-MH2-ETW2-3	1.588	0.2561	0.1174	0.0098	188.90	ILS	4.712	4.610
AITR1392-8HG-SBS1-C-MH2-ETW2-4					NT			
Minimum	1.5010	0.2508	0.1088	0.0091	161.50		4.331	3.931
Maximum	1.5900	0.2568	0.1206	0.0101	205.80		5.104	5.112
Average	1.5579	0.2543	0.1176	0.0098	183.99		4.614	4.522
Standard Deviation	0.0390	0.0021	0.0029	0.0002	11.73		0.241	0.304
Coefficient of Variation (%)	2.50	0.84	2.50	2.50	6.38		5.22	6.72
No. Specimens	18	18	18	18	18		18	18

Notes:
NT=Not Tested
NR=No Result
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT1	MH	CTD				

Test Group: AITR1392-8HG-OHT1-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 1 Condition: CTD #Plies: 12

Test Method: MP1117 (ASTMD5766)

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Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-OHT1-A-MH1-CTD-1	12.0000	1.5070	0.1130	0.0094	0.2481	6.0742	2.1956	6106.19	35.86	LGM	33.77
AITR1392-8HG-OHT1-A-MH1-CTD-2	12.0000	1.5070	0.1140	0.0095	0.2481	6.0742	2.1763	5994.85	34.89	LGM	33.15
AITR1392-8HG-OHT1-A-MH1-CTD-3	12.0000	1.5070	0.1130	0.0094	0.2473	6.0938	2.1885	5965.63	35.03	LGM	32.99
AITR1392-8HG-OHT1-A-MH1-CTD-4	12.0000							NT			
AITR1392-8HG-OHT1-A-MH2-CTD-1	12.0000	1.5080	0.1190	0.0099	0.2470	6.1053	2.0756	6147.09	34.25	LGM	33.97
AITR1392-8HG-OHT1-A-MH2-CTD-2	12.0000	1.5100	0.1170	0.0098	0.2483	6.0814	2.1222	5909.74	33.45	LGM	32.61
AITR1392-8HG-OHT1-A-MH2-CTD-3	12.0000	1.5080	0.1190	0.0099	0.2470	6.1053	2.0756	5805.29	32.35	LGM	32.08
AITR1392-8HG-OHT1-A-MH2-CTD-4	12.0000							NT			
AITR1392-8HG-OHT1-B-MH1-CTD-1	12.0000	1.5090	0.1220	0.0102	0.2471	6.1068	2.0254	6049.03	32.86	LGM	33.41
AITR1392-8HG-OHT1-B-MH1-CTD-2	12.0000	1.5070	0.1220	0.0102	0.2471	6.0987	2.0254	5917.20	32.18	LGM	32.72
AITR1392-8HG-OHT1-B-MH1-CTD-3	12.0000	1.5080	0.1210	0.0101	0.2470	6.1053	2.0413	6104.80	33.46	LGM	33.74
AITR1392-8HG-OHT1-B-MH1-CTD-4	12.0000							NT			
AITR1392-8HG-OHT1-B-MH2-CTD-1	12.0000	1.5070	0.1180	0.0098	0.2470	6.1012	2.0932	5925.19	33.32	LGM	32.76
AITR1392-8HG-OHT1-B-MH2-CTD-2	12.0000	1.5080	0.1180	0.0098	0.2480	6.0806	2.1017	5913.24	33.23	LGM	32.68
AITR1392-8HG-OHT1-B-MH2-CTD-3	12.0000	1.5070	0.1210	0.0101	0.2472	6.0963	2.0430	6006.91	32.94	LGM	33.22
AITR1392-8HG-OHT1-B-MH2-CTD-4	12.0000							NT			
AITR1392-8HG-OHT1-C-MH1-CTD-1	12.0000	1.5040	0.1210	0.0101	0.2470	6.0891	2.0413	5918.85	32.52	LGM	32.80
AITR1392-8HG-OHT1-C-MH1-CTD-2	12.0000	1.5040	0.1140	0.0095	0.2470	6.0891	2.1667	5999.30	34.99	LGM	33.24
AITR1392-8HG-OHT1-C-MH1-CTD-3	12.0000	1.5040	0.1190	0.0099	0.2478	6.0694	2.0824	6141.80	34.32	LGM	34.03
AITR1392-8HG-OHT1-C-MH1-CTD-4	12.0000							NT			
AITR1392-8HG-OHT1-C-MH2-CTD-1	12.0000	1.5080	0.1220	0.0102	0.2471	6.1028	2.0254	6102.96	33.17	LGM	33.73
AITR1392-8HG-OHT1-C-MH2-CTD-2	12.0000	1.5080	0.1190	0.0099	0.2472	6.1003	2.0773	6032.70	33.62	LGM	33.34
AITR1392-8HG-OHT1-C-MH2-CTD-3	12.0000	1.5070	0.1190	0.0099	0.2472	6.0963	2.0773	5958.84	33.23	LGM	32.95
AITR1392-8HG-OHT1-C-MH2-CTD-4	12.0000							NT			
Minimum	12.0000	1.5040	0.1130	0.0094	0.2470	6.0694	2.0254	5805.2940	32.1842		32.0805
Maximum	12.0000	1.5100	0.1220	0.0102	0.2483	6.1068	2.1956	6147.0860	35.8574		34.0304
Average	12.0000	1.5071	0.1184	0.0099	0.2474	6.0928	2.0908	5999.9777	33.6489		33.1760
Standard Deviation	0.0000	0.0016	0.0031	0.0003	0.0005	0.0121	0.0572	95.0696	1.0273		0.5302
Coefficient of Variation (%)	0.00	0.11	2.59	2.59	0.19	0.20	2.74	1.58	3.05		1.60
No. Specimens	24	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT1	MH	RTD				

Test Group: AITR1392-8HG-OHT1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 1 Condition: RTD #Plies: 12

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHT1-A-MH1-RTD-1	12.0000	1.5040	0.1180	0.0098	0.2470	6.0891	2.0932	4736.25	26.69	LGM	26.24
AITR1392-8HG-OHT1-A-MH1-RTD-2	12.0000	1.5050	0.1150	0.0096	0.2483	6.0612	2.1591	4663.80	26.95	LGM	25.82
AITR1392-8HG-OHT1-A-MH1-RTD-3	12.0000	1.5060	0.1190	0.0099	0.2472	6.0922	2.0773	4744.47	26.47	LGM	26.25
AITR1392-8HG-OHT1-A-MH1-RTD-4	12.0000	1.5060	0.1190	0.0099	0.2481	6.0701	2.0849	4782.22	26.68	LGM	26.46
AITR1392-8HG-OHT1-A-MH2-RTD-1	12.0000	1.5040	0.1180	0.0098	0.2472	6.0841	2.0949	4707.16	26.52	LGM	26.08
AITR1392-8HG-OHT1-A-MH2-RTD-2	12.0000	1.5050	0.1180	0.0098	0.2483	6.0612	2.1042	4703.07	26.48	LGM	26.04
AITR1392-8HG-OHT1-A-MH2-RTD-3	12.0000	1.5040	0.1220	0.0102	0.2484	6.0548	2.0361	4632.37	25.25	LGM	25.67
AITR1392-8HG-OHT1-A-MH2-RTD-4	12.0000	1.5050	0.1140	0.0095	0.2475	6.0808	2.1711	4784.86	27.89	LGM	26.49
AITR1392-8HG-OHT1-B-MH1-RTD-1	12.0000	1.5060	0.1190	0.0099	0.2475	6.0848	2.0798	4713.35	26.30	LGM	26.08
AITR1392-8HG-OHT1-B-MH1-RTD-2	12.0000	1.5050	0.1200	0.0100	0.2471	6.0907	2.0592	4738.68	26.24	LGM	26.24
AITR1392-8HG-OHT1-B-MH1-RTD-3	12.0000	1.5050	0.1180	0.0098	0.2470	6.0931	2.0932	4787.78	26.96	LGM	26.51
AITR1392-8HG-OHT1-B-MH1-RTD-4	12.0000							NT			
AITR1392-8HG-OHT1-B-MH2-RTD-1	12.0000	1.5050	0.1200	0.0100	0.2472	6.0882	2.0600	4724.82	26.16	LGM	26.16
AITR1392-8HG-OHT1-B-MH2-RTD-2	12.0000	1.5060	0.1210	0.0101	0.2472	6.0922	2.0430	4566.32	25.06	LGM	25.27
AITR1392-8HG-OHT1-B-MH2-RTD-3	12.0000	1.5050	0.1200	0.0100	0.2473	6.0857	2.0608	4762.11	26.37	LGM	26.37
AITR1392-8HG-OHT1-B-MH2-RTD-4	12.0000							NT			
AITR1392-8HG-OHT1-C-MH1-RTD-1	12.0000	1.5040	0.1170	0.0098	0.2475	6.0768	2.1154	4665.88	26.52	LGM	25.85
AITR1392-8HG-OHT1-C-MH1-RTD-2	12.0000	1.5020	0.1160	0.0097	0.2471	6.0785	2.1302	4550.75	26.12	LGM	25.25
AITR1392-8HG-OHT1-C-MH1-RTD-3	12.0000	1.5010	0.1170	0.0098	0.2470	6.0769	2.1111	4660.55	26.54	LGM	25.87
AITR1392-8HG-OHT1-C-MH1-RTD-4	12.0000							NT			
AITR1392-8HG-OHT1-C-MH2-RTD-1	12.0000	1.5060	0.1170	0.0098	0.2472	6.0922	2.1128	4808.39	27.29	LGM	26.61
AITR1392-8HG-OHT1-C-MH2-RTD-2	12.0000	1.5060	0.1160	0.0097	0.2470	6.0972	2.1293	4773.55	27.32	LGM	26.41
AITR1392-8HG-OHT1-C-MH2-RTD-3	12.0000	1.5060	0.1170	0.0098	0.2472	6.0922	2.1128	4808.07	27.29	LGM	26.61
AITR1392-8HG-OHT1-C-MH2-RTD-4	12.0000							NT			
Minimum	12.0000	1.5010	0.1140	0.0095	0.2470	6.0548	2.0361	4550.7450	25.0585		25.2483
Maximum	12.0000	1.5060	0.1220	0.0102	0.2484	6.0972	2.1711	4808.3880	27.8887		26.6068
Average	12.0000	1.5048	0.1181	0.0098	0.2474	6.0821	2.0964	4715.7210	26.5547		26.1147
Standard Deviation	0.0000	0.0014	0.0020	0.0002	0.0005	0.0121	0.0357	73.9174	0.6613		0.3973
Coefficient of Variation (%)	0.00	0.09	1.70	1.70	0.19	0.20	1.70	1.57	2.49		1.52
No. Specimens	24	20	20	20	20	20	20	20	20		20

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT1	MH	ETW				

Test Group: AITR1392-8HG-OHT1-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 1 Condition: ETW #Plies: 12

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-OHT1-A-MH1-ETW-1	12.0080	1.5060	0.1130	0.0094	0.2480	6.0726	2.1947	3212.00	18.87	LGM	17.77
AITR1392-8HG-OHT1-A-MH1-ETW-2	12.0090	1.5060	0.1160	0.0097	0.2480	6.0726	2.1379	3207.00	18.36	LGM	17.75
AITR1392-8HG-OHT1-A-MH1-ETW-3	12.0080	1.5060	0.1170	0.0098	0.2480	6.0726	2.1197	3227.00	18.31	LGM	17.86
AITR1392-8HG-OHT1-A-MH1-ETW-4	12.0050							NT			
AITR1392-8HG-OHT1-A-MH2-ETW-1	12.0090	1.5050	0.1200	0.0100	0.2480	6.0685	2.0667	3263.00	18.07	LGM	18.07
AITR1392-8HG-OHT1-A-MH2-ETW-2	12.0020	1.5050	0.1160	0.0097	0.2482	6.0637	2.1397	3248.00	18.60	LGM	17.98
AITR1392-8HG-OHT1-A-MH2-ETW-3	12.0070	1.5040	0.1200	0.0100	0.2481	6.0621	2.0675	3266.00	18.10	LGM	18.10
AITR1392-8HG-OHT1-A-MH2-ETW-4	12.0030							NT			
Minimum	12.0020	1.5040	0.1130	0.0094	0.2480	6.0621	2.0667	3207.0000	18.0676		17.7457
Maximum	12.0090	1.5060	0.1200	0.0100	0.2482	6.0726	2.1947	3266.0000	18.8744		18.0962
Average	12.0064	1.5053	0.1170	0.0098	0.2481	6.0687	2.1210	3237.1667	18.3858		17.9206
Standard Deviation	0.0027	0.0008	0.0027	0.0002	0.0001	0.0048	0.0487	25.5454	0.3091		0.1503
Coefficient of Variation (%)	0.02	0.05	2.29	2.29	0.03	0.08	2.30	0.79	1.68		0.84
No. Specimens	8	6	6	6	6	6	6	6	6		6

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT1	MH	ETW2				

Test Group: AITR1392-8HG-OHT1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 1 Condition: ETW2 #Plies: 12

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHT1-A-MH1-ETW2-1	12.0010	1.5060	0.1145	0.0095	0.2481	6.0701	2.1668	3044.00	17.65	LGM	16.84
AITR1392-8HG-OHT1-A-MH1-ETW2-2	12.0070	1.5060	0.1176	0.0098	0.2480	6.0726	2.1088	3092.00	17.46	LGM	17.11
AITR1392-8HG-OHT1-A-MH1-ETW2-3	12.0100	1.5060	0.1178	0.0098	0.2481	6.0701	2.1061	3096.00	17.45	LGM	17.13
AITR1392-8HG-OHT1-A-MH1-ETW2-4	12.0100	1.5060	0.1178	0.0098	0.2470	6.0972	2.0968	NT			
AITR1392-8HG-OHT1-A-MH2-ETW2-1	12.0100	1.5060	0.1161	0.0097	0.2480	6.0726	2.1361	3069.00	17.55	LGM	16.98
AITR1392-8HG-OHT1-A-MH2-ETW2-2	12.0080	1.5040	0.1203	0.0100	0.2479	6.0670	2.0607	3092.00	17.09	LGM	17.13
AITR1392-8HG-OHT1-A-MH2-ETW2-3	12.0080	1.5050	0.1205	0.0100	0.2483	6.0612	2.0606	3119.00	17.20	LGM	17.27
AITR1392-8HG-OHT1-A-MH2-ETW2-4								NT			
AITR1392-8HG-OHT1-B-MH1-ETW2-1	12.0040	1.5060	0.1173	0.0098	0.2479	6.0750	2.1134	3057.00	17.31	LGM	16.92
AITR1392-8HG-OHT1-B-MH1-ETW2-2	12.0080	1.5060	0.1103	0.0092	0.2476	6.0824	2.2448	3006.00	18.10	LGM	16.63
AITR1392-8HG-OHT1-B-MH1-ETW2-3	12.0070	1.5060	0.1193	0.0099	0.2480	6.0726	2.0788	3033.00	16.88	LGM	16.78
AITR1392-8HG-OHT1-B-MH1-ETW2-4								NT			
AITR1392-8HG-OHT1-B-MH2-ETW2-1	12.0020	1.5050	0.1199	0.0100	0.2478	6.0734	2.0667	3189.00	17.67	LGM	17.66
AITR1392-8HG-OHT1-B-MH2-ETW2-2	12.0040	1.5050	0.1157	0.0096	0.2482	6.0637	2.1452	3198.00	18.37	LGM	17.71
AITR1392-8HG-OHT1-B-MH2-ETW2-3	12.0060	1.5060	0.1212	0.0101	0.2481	6.0701	2.0470	3027.00	16.58	LGM	16.75
AITR1392-8HG-OHT1-B-MH2-ETW2-4								NT			
AITR1392-8HG-OHT1-C-MH1-ETW2-1	12.0050	1.5020	0.1183	0.0099	0.2477	6.0638	2.0938	3056.00	17.20	LGM	16.96
AITR1392-8HG-OHT1-C-MH1-ETW2-2	12.0030	1.5020	0.1192	0.0099	0.2475	6.0687	2.0763	3100.00	17.31	LGM	17.20
AITR1392-8HG-OHT1-C-MH1-ETW2-3	12.0060	1.5010	0.1188	0.0099	0.2486	6.0378	2.0926	3070.00	17.22	LGM	17.04
AITR1392-8HG-OHT1-C-MH1-ETW2-4								NT			
AITR1392-8HG-OHT1-C-MH2-ETW2-1	12.0100	1.5060	0.1206	0.0101	0.2477	6.0799	2.0539	3096.00	17.05	LGM	17.13
AITR1392-8HG-OHT1-C-MH2-ETW2-2	12.0030	1.5070	0.1161	0.0097	0.2475	6.0889	2.1318	3076.00	17.58	LGM	17.01
AITR1392-8HG-OHT1-C-MH2-ETW2-3	12.0040	1.5060	0.1213	0.0101	0.2486	6.0579	2.0495	3063.00	16.77	LGM	16.95
AITR1392-8HG-OHT1-C-MH2-ETW2-4								NT			
Minimum	12.0010	1.5010	0.1103	0.0092	0.2470	6.0378	2.0470	3006.0000	16.5838		16.6335
Maximum	12.0100	1.5070	0.1213	0.0101	0.2486	6.0972	2.2448	3198.0000	18.3657		17.7076
Average	12.0061	1.5051	0.1180	0.0098	0.2479	6.0708	2.1016	3082.3889	17.3573		17.0669
Standard Deviation	0.0029	0.0017	0.0027	0.0002	0.0004	0.0123	0.0488	49.6128	0.4388		0.2778
Coefficient of Variation (%)	0.02	0.11	2.29	2.29	0.16	0.20	2.32	1.61	2.53		1.63
No. Specimens	19	19	19	19	19	19	19	18	18		18

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT2	MH	CTD				

Test Group: AITR1392-8HG-OHT2-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 2 Condition: CTD #Plies: 15

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHT2-A-MH1-CTD-1	12.0000	1.5100	0.1480	0.0099	0.2474	6.1035	1.6716	7305.09	32.69	AGM	32.25
AITR1392-8HG-OHT2-A-MH1-CTD-2	12.0000	1.5110	0.1470	0.0098	0.2485	6.0805	1.6905	7294.02	32.84	AGM	32.18
AITR1392-8HG-OHT2-A-MH1-CTD-3	12.0000	1.5080	0.1500	0.0100	0.2487	6.0635	1.6580	7350.03	32.49	AGM	32.49
AITR1392-8HG-OHT2-A-MH1-CTD-4								NT			
AITR1392-8HG-OHT2-A-MH2-CTD-1	12.0000	1.5110	0.1460	0.0097	0.2472	6.1125	1.6932	7440.77	33.73	AGM	32.83
AITR1392-8HG-OHT2-A-MH2-CTD-2	12.0000	1.5090	0.1480	0.0099	0.2471	6.1068	1.6696	7360.05	32.96	AGM	32.52
AITR1392-8HG-OHT2-A-MH2-CTD-3	12.0000	1.5080	0.1500	0.0100	0.2486	6.0660	1.6573	7465.65	33.00	AGM	33.00
AITR1392-8HG-OHT2-A-MH2-CTD-4								NT			
AITR1392-8HG-OHT2-B-MH1-CTD-1	12.0000	1.5070	0.1440	0.0096	0.2470	6.1012	1.7153	7895.86	36.39	AGM	34.93
AITR1392-8HG-OHT2-B-MH1-CTD-2	12.0000	1.5090	0.1450	0.0097	0.2476	6.0945	1.7076	7565.06	34.57	AGM	33.42
AITR1392-8HG-OHT2-B-MH1-CTD-3	12.0000	1.5050	0.1470	0.0098	0.2474	6.0833	1.6830	7411.60	33.50	AGM	32.83
AITR1392-8HG-OHT2-B-MH1-CTD-4								NT			
AITR1392-8HG-OHT2-B-MH2-CTD-1	12.0000	1.5080	0.1480	0.0099	0.2471	6.1028	1.6696	7351.95	32.94	AGM	32.50
AITR1392-8HG-OHT2-B-MH2-CTD-2	12.0000	1.5060	0.1460	0.0097	0.2478	6.0775	1.6973	7238.51	32.92	AGM	32.04
AITR1392-8HG-OHT2-B-MH2-CTD-3	12.0000	1.5100	0.1470	0.0098	0.2472	6.1084	1.6816	7621.02	34.33	AGM	33.65
AITR1392-8HG-OHT2-B-MH2-CTD-4								NT			
AITR1392-8HG-OHT2-C-MH1-CTD-1	12.0000	1.5080	0.1470	0.0098	0.2473	6.0979	1.6823	7202.21	32.49	AGM	31.84
AITR1392-8HG-OHT2-C-MH1-CTD-2	12.0000	1.5080	0.1400	0.0093	0.2476	6.0905	1.7686	7516.13	35.60	AGM	33.23
AITR1392-8HG-OHT2-C-MH1-CTD-3	12.0000	1.5080	0.1430	0.0095	0.2474	6.0954	1.7301	7284.35	33.78	AGM	32.20
AITR1392-8HG-OHT2-C-MH1-CTD-4								NT			
AITR1392-8HG-OHT2-C-MH2-CTD-1	12.0000	1.5070	0.1510	0.0101	0.2483	6.0693	1.6444	7323.43	32.18	AGM	32.40
AITR1392-8HG-OHT2-C-MH2-CTD-2	12.0000	1.5100	0.1490	0.0099	0.2478	6.0936	1.6631	7491.33	33.30	AGM	33.07
AITR1392-8HG-OHT2-C-MH2-CTD-3	12.0000	1.5100	0.1500	0.0100	0.2486	6.0740	1.6573	7147.24	31.56	AGM	31.56
AITR1392-8HG-OHT2-C-MH2-CTD-4								NT			
Minimum	12.0000	1.5050	0.1400	0.0093	0.2470	6.0635	1.6444	7147.2440	31.5552		31.5552
Maximum	12.0000	1.5110	0.1510	0.0101	0.2487	6.1125	1.7686	7895.8550	36.3851		34.9297
Average	12.0000	1.5085	0.1470	0.0098	0.2477	6.0901	1.6856	7403.5706	33.4039		32.7194
Standard Deviation	0.0000	0.0017	0.0028	0.0002	0.0006	0.0153	0.0304	175.6729	1.1988		0.7796
Coefficient of Variation (%)	0.00	0.11	1.88	1.88	0.24	0.25	1.81	2.37	3.59		2.38
No. Specimens	18	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT2	MH	ETW2				

Test Group: AITR1392-8HG-OHT2-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 2 Condition: ETW2 #Plies: 15

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-OHT2-A-MH1-ETW2-1	12.0100	1.5070	0.1470	0.0098	0.2480	6.0766	1.6871	3279.38	14.80	AGM	14.51
AITR1392-8HG-OHT2-A-MH1-ETW2-2	12.0100	1.5070	0.1500	0.0100	0.2480	6.0766	1.6533	3315.45	14.67	AGM	14.67
AITR1392-8HG-OHT2-A-MH1-ETW2-3	12.0110	1.5070	0.1490	0.0099	0.2470	6.1012	1.6577	3398.38	15.13	AGM	15.03
AITR1392-8HG-OHT2-A-MH1-ETW2-4	12.0130	1.5070	0.1480	0.0099	0.2470	6.1012	1.6689	3170.02	14.21	AGM	14.02
AITR1392-8HG-OHT2-A-MH2-ETW2-1	12.0080	1.5070	0.1470	0.0098	0.2470	6.1012	1.6803	3034.49	13.70	AGM	13.42
AITR1392-8HG-OHT2-A-MH2-ETW2-2	12.0070	1.5070	0.1480	0.0099	0.2480	6.0766	1.6757	3142.45	14.09	AGM	13.90
AITR1392-8HG-OHT2-A-MH2-ETW2-3	12.0100	1.5070	0.1460	0.0097	0.2470	6.1012	1.6918	3173.39	14.42	AGM	14.04
AITR1392-8HG-OHT2-A-MH2-ETW2-4	12.0110	1.5070	0.1470	0.0098	0.2470	6.1012	1.6803	NT			
Minimum	12.0070	1.5070	0.1460	0.0097	0.2470	6.0766	1.6533	3034.4910	13.6979		13.4240
Maximum	12.0130	1.5070	0.1500	0.0100	0.2480	6.1012	1.6918	3398.3790	15.1346		15.0337
Average	12.0100	1.5070	0.1478	0.0099	0.2474	6.0920	1.6744	3216.2223	14.4326		14.2279
Standard Deviation	0.0019	0.0000	0.0013	0.0001	0.0005	0.0127	0.0136	122.1014	0.4815		0.5402
Coefficient of Variation (%)	0.02	0.00	0.87	0.87	0.21	0.21	0.81	3.80	3.34		3.80
No. Specimens	8	8	8	8	8	8	8	7	7		7

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT3	MH	CTD				

Test Group: AITR1392-8HG-OHT3-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 3 Condition: CTD #Plies: 15

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHT3-A-MH1-CTD-1	12.0000	1.5080	0.1520	0.0101	0.2488	6.0611	1.6368	8747.96	38.16	LGM	38.67
AITR1392-8HG-OHT3-A-MH1-CTD-2	12.0000	1.5070	0.1510	0.0101	0.2477	6.0840	1.6404	8714.25	38.29	LGM	38.55
AITR1392-8HG-OHT3-A-MH1-CTD-3	12.0000	1.5100	0.1470	0.0098	0.2476	6.0985	1.6844	8393.15	37.81	LGM	37.06
AITR1392-8HG-OHT3-A-MH1-CTD-4								NT			
AITR1392-8HG-OHT3-A-MH2-CTD-1	12.0000	1.5090	0.1610	0.0107	0.2478	6.0896	1.5391	8835.37	36.37	LGM	39.03
AITR1392-8HG-OHT3-A-MH2-CTD-2	12.0000	1.5100	0.1620	0.0108	0.2470	6.1134	1.5247	9310.30	38.06	LGM	41.11
AITR1392-8HG-OHT3-A-MH2-CTD-3	12.0000	1.5090	0.1590	0.0106	0.2488	6.0651	1.5648	8787.92	36.63	LGM	38.82
AITR1392-8HG-OHT3-A-MH2-CTD-4								NT			
AITR1392-8HG-OHT3-B-MH1-CTD-1	12.0000	1.5050	0.1440	0.0096	0.2476	6.0784	1.7194	8764.97	40.44	LGM	38.83
AITR1392-8HG-OHT3-B-MH1-CTD-2	12.0000	1.5030	0.1520	0.0101	0.2478	6.0654	1.6303	8158.28	35.71	LGM	36.19
AITR1392-8HG-OHT3-B-MH1-CTD-3	12.0000	1.5050	0.1470	0.0098	0.2474	6.0833	1.6830	8282.13	37.44	LGM	36.69
AITR1392-8HG-OHT3-B-MH1-CTD-4								NT			
AITR1392-8HG-OHT3-B-MH2-CTD-1	12.0000	1.5070	0.1470	0.0098	0.2483	6.0693	1.6891	9021.77	40.72	LGM	39.91
AITR1392-8HG-OHT3-B-MH2-CTD-2	12.0000	1.5090	0.1500	0.0100	0.2476	6.0945	1.6507	8629.61	38.13	LGM	38.13
AITR1392-8HG-OHT3-B-MH2-CTD-3	12.0000	1.5080	0.1480	0.0099	0.2484	6.0709	1.6784	8880.00	39.79	LGM	39.26
AITR1392-8HG-OHT3-B-MH2-CTD-4								NT			
AITR1392-8HG-OHT3-C-MH1-CTD-1	12.0000	1.5090	0.1430	0.0095	0.2476	6.0945	1.7315	8260.78	38.28	LGM	36.50
AITR1392-8HG-OHT3-C-MH1-CTD-2	12.0000	1.5100	0.1420	0.0095	0.2478	6.0936	1.7451	8433.45	39.33	LGM	37.23
AITR1392-8HG-OHT3-C-MH1-CTD-3	12.0000	1.5090	0.1420	0.0095	0.2479	6.0871	1.7458	8222.43	38.37	LGM	36.33
AITR1392-8HG-OHT3-C-MH1-CTD-4								NT			
AITR1392-8HG-OHT3-C-MH2-CTD-1	12.0000	1.5070	0.1470	0.0098	0.2482	6.0717	1.6884	8602.57	38.83	LGM	38.06
AITR1392-8HG-OHT3-C-MH2-CTD-2	12.0000	1.5070	0.1410	0.0094	0.2482	6.0717	1.7603	8364.01	39.36	LGM	37.00
AITR1392-8HG-OHT3-C-MH2-CTD-3	12.0000	1.5070	0.1470	0.0098	0.2490	6.0522	1.6939	9507.14	42.92	LGM	42.06
AITR1392-8HG-OHT3-C-MH2-CTD-4								NT			
Minimum	12.0000	1.5030	0.1410	0.0094	0.2470	6.0522	1.5247	8158.2800	35.7105		36.1866
Maximum	12.0000	1.5100	0.1620	0.0108	0.2490	6.1134	1.7603	9507.1360	42.9160		42.0577
Average	12.0000	1.5077	0.1490	0.0099	0.2480	6.0802	1.6670	8662.0055	38.5917		38.3003
Standard Deviation	0.0000	0.0019	0.0063	0.0004	0.0005	0.0156	0.0688	371.6628	1.7026		1.6355
Coefficient of Variation (%)	0.00	0.13	4.24	4.24	0.21	0.26	4.13	4.29	4.41		4.27
No. Specimens	18	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT3	MH	RTD				

Test Group: AITR1392-8HG-OHT3-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 3 Condition: RTD #Plies: 15

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHT3-A-MH1-RTD-1	12.0000	1.5070	0.1520	0.0101	0.2493	6.0449	1.6401	6497.42	28.37	LGM	28.74
AITR1392-8HG-OHT3-A-MH1-RTD-2	12.0000	1.5010	0.1510	0.0101	0.2491	6.0257	1.6497	6747.56	29.77	LGM	29.97
AITR1392-8HG-OHT3-A-MH1-RTD-3	12.0000	1.5080	0.1570	0.0105	0.2492	6.0514	1.5873	6649.40	28.09	LGM	29.40
AITR1392-8HG-OHT3-A-MH1-RTD-4								NT			
AITR1392-8HG-OHT3-A-MH2-RTD-1	12.0000	1.5090	0.1550	0.0103	0.2488	6.0651	1.6052	7070.80	30.23	LGM	31.24
AITR1392-8HG-OHT3-A-MH2-RTD-2	12.0000	1.5080	0.1560	0.0104	0.2477	6.0880	1.5878	6910.51	29.38	LGM	30.55
AITR1392-8HG-OHT3-A-MH2-RTD-3	12.0000	1.5060	0.1600	0.0107	0.2488	6.0531	1.5550	7209.79	29.92	LGM	31.92
AITR1392-8HG-OHT3-A-MH2-RTD-4								NT			
Minimum	12.0000	1.5010	0.1510	0.0101	0.2477	6.0257	1.5550	6497.4200	28.0855		28.7433
Maximum	12.0000	1.5090	0.1600	0.0107	0.2493	6.0880	1.6497	7209.7870	30.2307		31.9158
Average	12.0000	1.5065	0.1552	0.0103	0.2488	6.0547	1.6042	6847.5803	29.2914		30.3022
Standard Deviation	0.0000	0.0029	0.0033	0.0002	0.0006	0.0208	0.0356	267.1610	0.8750		1.1751
Coefficient of Variation (%)	0.00	0.19	2.13	2.13	0.23	0.34	2.22	3.90	2.99		3.88
No. Specimens	6	6	6	6	6	6	6	6	6		6

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	OHT3	MH	ETW2				

Test Group: AITR1392-8HG-OHT3-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Tension Layup 3 Condition: ETW2 #Plies: 15

Test Method: MP1117 (ASTMD5766)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-OHT3-A-MH1-ETW2-1	12.0110	1.5080	0.1540	0.0103	0.2493	6.0489	1.6188	4495.15	19.36	LGM	19.87
AITR1392-8HG-OHT3-A-MH1-ETW2-2	12.0170	1.5080	0.1480	0.0099	0.2490	6.0562	1.6824	4372.76	19.59	LGM	19.33
AITR1392-8HG-OHT3-A-MH1-ETW2-3	12.0100	1.5070	0.1510	0.0101	0.2488	6.0571	1.6477	4316.90	18.97	LGM	19.10
AITR1392-8HG-OHT3-A-MH1-ETW2-4	12.0150	1.5080	0.1460	0.0097	0.2489	6.0587	1.7048	NT			
AITR1392-8HG-OHT3-A-MH2-ETW2-1	12.0140	1.5080	0.1550	0.0103	0.2490	6.0562	1.6065	4637.42	19.84	LGM	20.50
AITR1392-8HG-OHT3-A-MH2-ETW2-2	12.0160	1.5080	0.1550	0.0103	0.2490	6.0562	1.6065	4580.47	19.60	LGM	20.25
AITR1392-8HG-OHT3-A-MH2-ETW2-3	12.0120	1.5070	0.1570	0.0105	0.2488	6.0571	1.5847	4695.55	19.85	LGM	20.77
AITR1392-8HG-OHT3-A-MH2-ETW2-4	12.0080	1.5080	0.1540	0.0103	0.2480	6.0806	1.6104	NT			
Minimum	12.0080	1.5070	0.1460	0.0097	0.2480	6.0489	1.5847	4316.8950	18.9706		19.0971
Maximum	12.0170	1.5080	0.1570	0.0105	0.2493	6.0806	1.7048	4695.5530	19.8460		20.7722
Average	12.0129	1.5078	0.1525	0.0102	0.2489	6.0589	1.6327	4516.3750	19.5337		19.9707
Standard Deviation	0.0031	0.0005	0.0038	0.0003	0.0004	0.0093	0.0419	149.4886	0.3309		0.6608
Coefficient of Variation (%)	0.03	0.03	2.50	2.50	0.15	0.15	2.56	3.31	1.69		3.31
No. Specimens	8	8	8	8	8	8	8	6	6		6

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC1	MH	RTD						

Test Group: AITR1392-8HG-OHC1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 1 Condition: RTD #Plies: 12

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC1-A-MH1-RTD-1	12.0000	1.5100	0.1150	0.0096	0.2470	0.6290	5.877	6.1134	2.1478	6326.00	36.43	LGM	34.91
AITR1392-8HG-OHC1-A-MH1-RTD-2	12.0000	1.5080	0.1160	0.0097	0.2471	0.6270	5.878	6.1028	2.1302	6206.00	35.48	LGM	34.29
AITR1392-8HG-OHC1-A-MH1-RTD-3	12.0000	1.5080	0.1140	0.0095	0.2485	0.6300	5.876	6.0684	2.1798	6184.00	35.97	LGM	34.17
AITR1392-8HG-OHC1-A-MH1-RTD-4										NT			
AITR1392-8HG-OHC1-A-MH2-RTD-1	12.0000	1.5080	0.1160	0.0097	0.2477	0.6280	5.878	6.0880	2.1353	6140.00	35.10	LGM	33.93
AITR1392-8HG-OHC1-A-MH2-RTD-2	12.0000	1.5080	0.1160	0.0097	0.2471	0.6280	5.878	6.1028	2.1302	6203.00	35.46	LGM	34.28
AITR1392-8HG-OHC1-A-MH2-RTD-3	12.0000	1.5080	0.1160	0.0097	0.2473	0.6280	5.878	6.0979	2.1319	6007.00	34.34	LGM	33.20
AITR1392-8HG-OHC1-A-MH2-RTD-4										NT			
AITR1392-8HG-OHC1-B-MH1-RTD-1	12.0000	1.5090	0.1219	0.0102	0.2475	0.6300	5.878	6.0970	2.0304	6082.00	33.06	LGM	33.59
AITR1392-8HG-OHC1-B-MH1-RTD-2	12.0000	1.5090	0.1200	0.0100	0.2477	0.6300	5.877	6.0920	2.0642	6243.00	34.48	LGM	34.48
AITR1392-8HG-OHC1-B-MH1-RTD-3	12.0000	1.5100	0.1221	0.0102	0.2481	0.6300	5.879	6.0863	2.0319	6379.00	34.60	LGM	35.20
AITR1392-8HG-OHC1-B-MH1-RTD-4										NT			
AITR1392-8HG-OHC1-B-MH2-RTD-1	12.0000	1.5100	0.1201	0.0100	0.2471	0.6300	5.879	6.1109	2.0575	6153.00	33.93	LGM	33.96
AITR1392-8HG-OHC1-B-MH2-RTD-2	12.0000	1.5100	0.1216	0.0101	0.2472	0.6300	5.873	6.1084	2.0329	6453.00	35.14	LGM	35.61
AITR1392-8HG-OHC1-B-MH2-RTD-3	12.0000	1.5100	0.1217	0.0101	0.2482	0.6280	5.879	6.0838	2.0394	6298.00	34.27	LGM	34.76
AITR1392-8HG-OHC1-B-MH2-RTD-4										NT			
AITR1392-8HG-OHC1-C-MH1-RTD-1	12.0000	1.5090	0.1188	0.0099	0.2484	0.6290	5.875	6.0749	2.0909	5879.00	32.79	LGM	32.47
AITR1392-8HG-OHC1-C-MH1-RTD-2	12.0000	1.5090	0.1191	0.0099	0.2482	0.6220	5.871	6.0798	2.0840	6410.00	35.67	LGM	35.40
AITR1392-8HG-OHC1-C-MH1-RTD-3	12.0000	1.5080	0.1154	0.0096	0.2481	0.6290	5.874	6.0782	2.1499	6022.00	34.60	LGM	33.28
AITR1392-8HG-OHC1-C-MH1-RTD-4										NT			
AITR1392-8HG-OHC1-C-MH2-RTD-1	12.0000	1.5100	0.1157	0.0096	0.2472	0.6280	5.875	6.1084	2.1366	6048.00	34.62	LGM	33.38
AITR1392-8HG-OHC1-C-MH2-RTD-2	12.0000	1.5090	0.1220	0.0102	0.2470	0.6270	5.875	6.1093	2.0246	6344.00	34.46	LGM	35.03
AITR1392-8HG-OHC1-C-MH2-RTD-3	12.0000	1.5090	0.1190	0.0099	0.2470	0.6290	5.875	6.1093	2.0756	6155.00	34.28	LGM	33.99
AITR1392-8HG-OHC1-C-MH2-RTD-4										NT			
Minimum	12.0000	1.5080	0.1140	0.0095	0.2470	0.6220	5.8710	6.0684	2.0246	5879.0000	32.7943		32.4663
Maximum	12.0000	1.5100	0.1221	0.0102	0.2485	0.6300	5.8790	6.1134	2.1798	6453.0000	36.4296		35.6126
Average	12.0000	1.5090	0.1184	0.0099	0.2476	0.6284	5.8764	6.0951	2.0929	6196.2222	34.7045		34.2180
Standard Deviation	0.0000	0.0008	0.0028	0.0002	0.0005	0.0019	0.0023	0.0141	0.0503	154.3668	0.9271		0.8448
Coefficient of Variation (%)	0.00	0.06	2.40	2.40	0.22	0.30	0.04	0.23	2.40	2.49	2.67		2.47
No. Specimens	18	18	18	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC1	MH	ETW						

Test Group: AITR1392-8HG-OHC1-MH-ETW

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 1 Condition: ETW #Plies: 12

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC1-A-MH1-ETW-1	12.0100	1.5080	0.1180	0.0098	0.2473	0.6260	5.873	6.0979	2.0958	4082.00	22.94	LGM	22.56
AITR1392-8HG-OHC1-A-MH1-ETW-2	12.0160	1.5080	0.1180	0.0098	0.2480	0.6270	5.877	6.0806	2.1017	4065.00	22.84	LGM	22.46
AITR1392-8HG-OHC1-A-MH1-ETW-3	12.0200	1.5100	0.1190	0.0099	0.2472	0.6290	5.878	6.1084	2.0773	4017.00	22.36	LGM	22.17
AITR1392-8HG-OHC1-A-MH1-ETW-4										NT			
AITR1392-8HG-OHC1-A-MH2-ETW-1	12.0150	1.5080	0.1140	0.0095	0.2480	0.6250	5.878	6.0806	2.1754	4085.00	23.76	LGM	22.57
AITR1392-8HG-OHC1-A-MH2-ETW-2	12.0160	1.5100	0.1170	0.0098	0.2481	0.6280	5.878	6.0863	2.1205	4126.00	23.35	LGM	22.77
AITR1392-8HG-OHC1-A-MH2-ETW-3	12.0160	1.5090	0.1170	0.0098	0.2470	0.6270	5.878	6.1093	2.1111	3968.00	22.47	LGM	21.91
AITR1392-8HG-OHC1-A-MH2-ETW-4										NT			
Minimum	12.0100	1.5080	0.1140	0.0095	0.2470	0.6250	5.8730	6.0806	2.0773	3968.0000	22.3552		21.9130
Maximum	12.0200	1.5100	0.1190	0.0099	0.2481	0.6290	5.8780	6.1093	2.1754	4126.0000	23.7622		22.7704
Average	12.0155	1.5088	0.1172	0.0098	0.2476	0.6270	5.8770	6.0939	2.1136	4057.1667	22.9551		22.4079
Standard Deviation	0.0032	0.0010	0.0017	0.0001	0.0005	0.0014	0.0020	0.0132	0.0336	56.1335	0.5317		0.3120
Coefficient of Variation (%)	0.03	0.07	1.47	1.47	0.20	0.23	0.03	0.22	1.59	1.38	2.32		1.39
No. Specimens	6	6	6	6	6	6	6	6	6	6	6		6

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC1	MH	ETW2						

Test Group: AITR1392-8HG-OHC1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 1 Condition: ETW2 #Plies: 12

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC1-A-MH1-ETW2-1	12.0140	1.5090	0.1160	0.0097	0.2470	0.6280	5.877	6.1093	2.1293	3512.00	20.06	LGM	19.39
AITR1392-8HG-OHC1-A-MH1-ETW2-2	12.0140	1.5100	0.1180	0.0098	0.2483	0.6280	5.878	6.0814	2.1042	3714.00	20.84	LGM	20.50
AITR1392-8HG-OHC1-A-MH1-ETW2-3	12.0190	1.5100	0.1170	0.0098	0.2480	0.6290	5.878	6.0887	2.1197	3732.00	21.12	LGM	20.60
AITR1392-8HG-OHC1-A-MH1-ETW2-4	12.0150	1.5100	0.1100	0.0092	0.2486	0.6280	5.878	6.0740	2.2600	NT			
AITR1392-8HG-OHC1-A-MH2-ETW2-1	12.0140	1.5090	0.1180	0.0098	0.2480	0.6280	5.878	6.0847	2.1017	3756.00	21.09	LGM	20.74
AITR1392-8HG-OHC1-A-MH2-ETW2-2	12.0120	1.5090	0.1170	0.0098	0.2470	0.6280	5.875	6.1093	2.1111	3601.00	20.40	LGM	19.89
AITR1392-8HG-OHC1-A-MH2-ETW2-3	12.0140	1.5090	0.1180	0.0098	0.2470	0.6300	5.878	6.1093	2.0932	3840.00	21.57	LGM	21.21
AITR1392-8HG-OHC1-A-MH2-ETW2-4	12.0150	1.5090	0.1170	0.0098	0.2476	0.6280	5.878	6.0945	2.1162	NT			
AITR1392-8HG-OHC1-B-MH1-ETW2-1	12.0140	1.5090	0.1200	0.0100	0.2471	0.6270	5.876	6.1068	2.0592	3816.00	21.07	LGM	21.07
AITR1392-8HG-OHC1-B-MH1-ETW2-2										NT			
AITR1392-8HG-OHC1-B-MH1-ETW2-3	12.0150	1.5100	0.1200	0.0100	0.2475	0.6290	5.879	6.1010	2.0625	3781.00	20.87	LGM	20.87
AITR1392-8HG-OHC1-B-MH1-ETW2-4	12.0180	1.5100	0.1240	0.0103	0.2470	0.6280	5.88	6.1134	1.9919	3703.00	19.78	LGM	20.44
AITR1392-8HG-OHC1-B-MH2-ETW2-1	12.0060	1.5100	0.1180	0.0098	0.2482	0.6300	5.871	6.0838	2.1034	3620.00	20.32	LGM	19.98
AITR1392-8HG-OHC1-B-MH2-ETW2-2	12.0100	1.5090	0.1210	0.0101	0.2479	0.6270	5.874	6.0871	2.0488	3688.00	20.20	LGM	20.37
AITR1392-8HG-OHC1-B-MH2-ETW2-3	12.0120	1.5090	0.1200	0.0100	0.2476	0.6290	5.877	6.0945	2.0633	4050.00	22.37	LGM	22.37
AITR1392-8HG-OHC1-B-MH2-ETW2-4	12.0110	1.5100	0.1190	0.0099	0.2478	0.6290	5.875	6.0936	2.0824	NT			
AITR1392-8HG-OHC1-C-MH1-ETW2-1	12.0130	1.5090	0.1180	0.0098	0.2470	0.6260	5.874	6.1093	2.0932	3868.00	21.72	LGM	21.36
AITR1392-8HG-OHC1-C-MH1-ETW2-2	12.0120	1.5050	0.1150	0.0096	0.2470	0.6260	5.871	6.0931	2.1478	3698.00	21.37	LGM	20.48
AITR1392-8HG-OHC1-C-MH1-ETW2-3	12.0130	1.5060	0.1180	0.0098	0.2470	0.6260	5.872	6.0972	2.0932	3665.00	20.62	LGM	20.28
AITR1392-8HG-OHC1-C-MH1-ETW2-4	12.0160	1.5060	0.1190	0.0099	0.2470	0.6270	5.874	6.0972	2.0756	NT			
AITR1392-8HG-OHC1-C-MH2-ETW2-1	12.0090	1.5090	0.1200	0.0100	0.2470	0.6290	5.873	6.1093	2.0583	3943.00	21.77	LGM	21.77
AITR1392-8HG-OHC1-C-MH2-ETW2-2	12.0120	1.5090	0.1200	0.0100	0.2470	0.6290	5.875	6.1093	2.0583	3737.00	20.64	LGM	20.64
AITR1392-8HG-OHC1-C-MH2-ETW2-3	12.0080	1.5080	0.1150	0.0096	0.2470	0.6270	5.872	6.1053	2.1478	3501.00	20.19	LGM	19.35
AITR1392-8HG-OHC1-C-MH2-ETW2-4	12.0150	1.5090	0.1180	0.0098	0.2470	0.6280	5.878	6.1093	2.0932	NT			
Minimum	12.0060	1.5050	0.1100	0.0092	0.2470	0.6260	5.8710	6.0740	1.9919	3501.0000	19.7768		19.3468
Maximum	12.0190	1.5100	0.1240	0.0103	0.2486	0.6300	5.8800	6.1134	2.2600	4050.0000	22.3658		22.3658
Average	12.0131	1.5088	0.1181	0.0098	0.2474	0.6280	5.8757	6.0983	2.0963	3734.7222	20.8888		20.6269
Standard Deviation	0.0030	0.0014	0.0027	0.0002	0.0005	0.0012	0.0027	0.0112	0.0499	138.4667	0.6891		0.7623
Coefficient of Variation (%)	0.02	0.09	2.25	2.25	0.21	0.19	0.05	0.18	2.38	3.71	3.30		3.70
No. Specimens	23	23	23	23	23	23	23	23	23	18	18		18

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC2	MH	RTD						

Test Group: AITR1392-8HG-OHC2-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 2 Condition: RTD #Plies: 15

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-OHC2-A-MH1-RTD-1	12.0000	1.5100	0.1448	0.0097	0.2473	0.6280	5.875	6.1059	1.7079	7113.00	32.53	AGM	31.40
AITR1392-8HG-OHC2-A-MH1-RTD-2	12.0000	1.5100	0.1474	0.0098	0.2480	0.6280	5.874	6.0887	1.6825	7083.00	31.82	AGM	31.27
AITR1392-8HG-OHC2-A-MH1-RTD-3	12.0000	1.5090	0.1487	0.0099	0.2478	0.6280	5.878	6.0896	1.6664	6947.00	30.96	AGM	30.69
AITR1392-8HG-OHC2-A-MH1-RTD-4	12.0000	1.5090	0.1464	0.0098	0.2473	0.6290	5.877	6.1019	1.6892	7016.00	31.76	AGM	31.00
AITR1392-8HG-OHC2-A-MH2-RTD-1	12.0000	1.5090	0.1452	0.0097	0.2472	0.6270	5.875	6.1044	1.7025	6989.00	31.90	LGM	30.88
AITR1392-8HG-OHC2-A-MH2-RTD-2	12.0000	1.5050	0.1467	0.0098	0.2470	0.6210	5.872	6.0931	1.6837	7309.00	33.10	LGM	32.38
AITR1392-8HG-OHC2-A-MH2-RTD-3	12.0000	1.4980	0.1457	0.0097	0.2478	0.6190	5.87	6.0452	1.7008	6888.00	31.56	LGM	30.65
AITR1392-8HG-OHC2-A-MH2-RTD-4	12.0000	1.5080	0.1439	0.0096	0.2474	0.6250	5.876	6.0954	1.7192	6672.00	30.75	AGM	29.50
Minimum	12.0000	1.4980	0.1439	0.0096	0.2470	0.6190	5.8700	6.0452	1.6664	6672.0000	30.7464		29.4960
Maximum	12.0000	1.5100	0.1487	0.0099	0.2480	0.6290	5.8780	6.1059	1.7192	7309.0000	33.1048		32.3765
Average	12.0000	1.5073	0.1461	0.0097	0.2475	0.6256	5.8746	6.0905	1.6940	7002.1250	31.7976		30.9709
Standard Deviation	0.0000	0.0041	0.0015	0.0001	0.0003	0.0037	0.0026	0.0194	0.0168	184.5523	0.7676		0.8121
Coefficient of Variation (%)	0.00	0.27	1.05	1.05	0.14	0.59	0.04	0.32	0.99	2.64	2.41		2.62
No. Specimens	8	8	8	8	8	8	8	8	8	8	8		8

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC2	MH	ETW2						

Test Group: AITR1392-8HG-OHC2-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 2 Condition: ETW2 #Plies: 15

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC2-A-MH1-ETW2-1	12.0080	1.5090	0.1470	0.0098	0.2470	0.6290	5.873	6.1093	1.6803	4019.00	18.12	LGM	17.76
AITR1392-8HG-OHC2-A-MH1-ETW2-2	12.0110	1.5110	0.1490	0.0099	0.2470	0.6290	5.873	6.1174	1.6577	4152.00	18.44	AGM	18.32
AITR1392-8HG-OHC2-A-MH1-ETW2-3	12.0080	1.5090	0.1420	0.0095	0.2480	0.6280	5.871	6.0847	1.7465	4084.00	19.06	AGM	18.04
AITR1392-8HG-OHC2-A-MH1-ETW2-4										NT			
AITR1392-8HG-OHC2-A-MH2-ETW2-1	12.0100	1.5090	0.1450	0.0097	0.2470	0.6260	5.875	6.1093	1.7034	4082.00	18.66	LGM	18.03
AITR1392-8HG-OHC2-A-MH2-ETW2-2	12.0080	1.5090	0.1420	0.0095	0.2470	0.6290	5.872	6.1093	1.7394	4136.00	19.30	LGM	18.27
AITR1392-8HG-OHC2-A-MH2-ETW2-3	12.0060	1.5080	0.1420	0.0095	0.2470	0.6280	5.87	6.1053	1.7394	4242.00	19.81	AGM/LGM	18.75
AITR1392-8HG-OHC2-A-MH2-ETW2-4										NT			
AITR1392-8HG-OHC2-B-MH1-ETW2-1	12.0040	1.5070	0.1450	0.0097	0.2470	0.6270	5.87	6.1012	1.7034	4148.00	18.98	LGM	18.35
AITR1392-8HG-OHC2-B-MH1-ETW2-2	12.0080	1.5090	0.1460	0.0097	0.2470	0.6290	5.871	6.1093	1.6918	4299.00	19.51	LGM	18.99
AITR1392-8HG-OHC2-B-MH1-ETW2-3	12.0070	1.5090	0.1500	0.0100	0.2480	0.6280	5.872	6.0847	1.6533	4566.00	20.17	LGM/AGM	20.17
AITR1392-8HG-OHC2-B-MH1-ETW2-4										NT			
AITR1392-8HG-OHC2-B-MH2-ETW2-1	12.0080	1.5080	0.1460	0.0097	0.2470	0.6290	5.871	6.1053	1.6918	4360.00	19.80	AGM/LGM	19.27
AITR1392-8HG-OHC2-B-MH2-ETW2-2	12.0110	1.5090	0.1490	0.0099	0.2470	0.6280	5.874	6.1093	1.6577	4633.00	20.61	LGM	20.47
AITR1392-8HG-OHC2-B-MH2-ETW2-3	12.0100	1.5090	0.1510	0.0101	0.2470	0.6280	5.874	6.1093	1.6358	4702.00	20.64	LGM/AGM	20.77
AITR1392-8HG-OHC2-B-MH2-ETW2-4										NT			
AITR1392-8HG-OHC2-C-MH1-ETW2-1	12.0100	1.5090	0.1500	0.0100	0.2470	0.6290	5.875	6.1093	1.6467	4296.00	18.98	LGM	18.98
AITR1392-8HG-OHC2-C-MH1-ETW2-2	12.0090	1.5090	0.1470	0.0098	0.2470	0.6280	5.874	6.1093	1.6803	4191.00	18.89	AGM	18.52
AITR1392-8HG-OHC2-C-MH1-ETW2-3	12.0100	1.5080	0.1500	0.0100	0.2470	0.6250	5.874	6.1053	1.6467	4322.00	19.11	AGM	19.11
AITR1392-8HG-OHC2-C-MH1-ETW2-4										NT			
AITR1392-8HG-OHC2-C-MH2-ETW2-1	12.0110	1.5090	0.1490	0.0099	0.2470	0.6280	5.874	6.1093	1.6577	4416.00	19.64	AGM	19.51
AITR1392-8HG-OHC2-C-MH2-ETW2-2	12.0150	1.5090	0.1500	0.0100	0.2470	0.6280	5.879	6.1093	1.6467	4219.00	18.64	AGM	18.64
AITR1392-8HG-OHC2-C-MH2-ETW2-3	12.0130	1.5090	0.1480	0.0099	0.2470	0.6290	5.877	6.1093	1.6689	4280.00	19.16	AGM	18.91
AITR1392-8HG-OHC2-C-MH2-ETW2-4										NT			
Minimum	12.0040	1.5070	0.1420	0.0095	0.2470	0.6250	5.8700	6.0847	1.6358	4019.0000	18.1180		17.7557
Maximum	12.0150	1.5110	0.1510	0.0101	0.2480	0.6290	5.8790	6.1174	1.7465	4702.0000	20.6356		20.7731
Average	12.0093	1.5088	0.1471	0.0098	0.2471	0.6281	5.8733	6.1059	1.6804	4285.9444	19.3069		18.9371
Standard Deviation	0.0025	0.0008	0.0030	0.0002	0.0003	0.0011	0.0024	0.0083	0.0347	191.6647	0.7025		0.8470
Coefficient of Variation (%)	0.02	0.05	2.02	2.02	0.13	0.18	0.04	0.14	2.07	4.47	3.64		4.47
No. Specimens	18	18	18	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC3	MH	RTD						

Test Group: AITR1392-8HG-OHC3-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 3 Condition: RTD #Plies: 15

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC3-A-MH1-RTD-1	12.0000	1.5080	0.1463	0.0098	0.2473	0.6280	5.874	6.0979	1.6904	8246.00	37.38	LGM	36.45
AITR1392-8HG-OHC3-A-MH1-RTD-2	12.0000	1.5090	0.1434	0.0096	0.2470	0.6280	5.877	6.1093	1.7225	8587.00	39.68	LGM	37.94
AITR1392-8HG-OHC3-A-MH1-RTD-3	12.0000	1.5090	0.1449	0.0097	0.2471	0.6280	5.876	6.1068	1.7053	8470.00	38.74	LGM	37.42
AITR1392-8HG-OHC3-A-MH1-RTD-4										NT			
AITR1392-8HG-OHC3-A-MH2-RTD-1	12.0000	1.5100	0.1466	0.0098	0.2474	0.6280	5.876	6.1035	1.6876	8585.00	38.78	LGM	37.90
AITR1392-8HG-OHC3-A-MH2-RTD-2	12.0000	1.5090	0.1468	0.0098	0.2478	0.6280	5.875	6.0896	1.6880	8240.00	37.20	LGM	36.40
AITR1392-8HG-OHC3-A-MH2-RTD-3	12.0000	1.5090	0.1478	0.0099	0.2476	0.6280	5.874	6.0945	1.6752	8260.00	37.04	LGM	36.49
AITR1392-8HG-OHC3-A-MH2-RTD-4										NT			
Minimum	12.0000	1.5080	0.1434	0.0096	0.2470	0.6280	5.8740	6.0896	1.6752	8240.0000	37.0353		36.4038
Maximum	12.0000	1.5100	0.1478	0.0099	0.2478	0.6280	5.8770	6.1093	1.7225	8587.0000	39.6829		37.9368
Average	12.0000	1.5090	0.1460	0.0097	0.2474	0.6280	5.8753	6.1003	1.6948	8398.0000	38.1351		37.1017
Standard Deviation	0.0000	0.0006	0.0016	0.0001	0.0003	0.0000	0.0012	0.0076	0.0166	169.1071	1.0808		0.7373
Coefficient of Variation (%)	0.00	0.04	1.07	1.07	0.12	0.00	0.02	0.12	0.98	2.01	2.83		1.99
No. Specimens	6	6	6	6	6	6	6	6	6	6	6		6

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	OHC3	MH	ETW2						

Test Group: AITR1392-8HG-OHC3-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Open-Hole Compression Layup 3 Condition: ETW2 #Plies: 15

Test Method: MP1119 (ASTMD6484)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-OHC3-A-MH1-ETW2-1	12.0070	1.5100	0.1500	0.0100	0.2475	0.6280	5.8783	6.1010	1.6500	5307.00	23.43	LGM	23.43
AITR1392-8HG-OHC3-A-MH1-ETW2-2	12.0090	1.5100	0.1450	0.0097	0.2475	0.6280	5.874	6.1010	1.7069	5599.00	25.57	LGM	24.72
AITR1392-8HG-OHC3-A-MH1-ETW2-3	12.0060	1.5090	0.1500	0.0100	0.2475	0.6260	5.873	6.0970	1.6500	5564.00	24.58	LGM	24.58
AITR1392-8HG-OHC3-A-MH1-ETW2-4	12.0040									NT			
AITR1392-8HG-OHC3-A-MH2-ETW2-1	12.0100	1.5100	0.1470	0.0098	0.2472	0.6280	5.878	6.1084	1.6816	5356.00	24.13	LGM	23.65
AITR1392-8HG-OHC3-A-MH2-ETW2-2	12.0070	1.5100	0.1460	0.0097	0.2473	0.6270	5.871	6.1059	1.6938	5157.00	23.39	LGM	22.77
AITR1392-8HG-OHC3-A-MH2-ETW2-3	12.0110	1.5110	0.1480	0.0099	0.2473	0.6290	5.878	6.1100	1.6709	5280.00	23.61	LGM	23.30
AITR1392-8HG-OHC3-A-MH2-ETW2-4	12.0100									NT			
AITR1392-8HG-OHC3-B-MH1-ETW2-1	12.0080	1.5100	0.1510	0.0101	0.2470	0.6280	5.872	6.1134	1.6358	5392.00	23.65	LGM	23.81
AITR1392-8HG-OHC3-B-MH1-ETW2-2	12.0070	1.5080	0.1470	0.0098	0.2470	0.6280	5.871	6.1053	1.6803	5310.00	23.95	LGM	23.47
AITR1392-8HG-OHC3-B-MH1-ETW2-3	12.0040	1.5090	0.1480	0.0099	0.2470	0.6270	5.87	6.1093	1.6689	5252.00	23.52	LGM	23.20
AITR1392-8HG-OHC3-B-MH1-ETW2-4	12.0070									NT			
AITR1392-8HG-OHC3-B-MH2-ETW2-1	12.0060	1.5080	0.1520	0.0101	0.2470	0.6290	5.87	6.1053	1.6250	5380.00	23.47	LGM	23.78
AITR1392-8HG-OHC3-B-MH2-ETW2-2	12.0070	1.5080	0.1490	0.0099	0.2470	0.6280	5.872	6.1053	1.6577	5526.00	24.59	LGM	24.43
AITR1392-8HG-OHC3-B-MH2-ETW2-3	12.0080	1.5080	0.1540	0.0103	0.2470	0.6290	5.871	6.1053	1.6039	5394.00	23.23	LGM	23.85
AITR1392-8HG-OHC3-B-MH2-ETW2-4	12.0070									NT			
AITR1392-8HG-OHC3-C-MH1-ETW2-1	12.0130	1.5090	0.1530	0.0102	0.2470	0.6270	5.878	6.1093	1.6144	5144.00	22.28	LGM	22.73
AITR1392-8HG-OHC3-C-MH1-ETW2-2	12.0080	1.5090	0.1460	0.0097	0.2470	0.6260	5.874	6.1093	1.6918	5204.00	23.62	LGM	22.99
AITR1392-8HG-OHC3-C-MH1-ETW2-3	12.0120	1.5090	0.1490	0.0099	0.2470	0.6280	5.877	6.1093	1.6577	5040.00	22.42	LGM	22.27
AITR1392-8HG-OHC3-C-MH1-ETW2-4	12.0080									NT			
AITR1392-8HG-OHC3-C-MH2-ETW2-1	12.0060	1.5070	0.1530	0.0102	0.2470	0.6250	5.875	6.1012	1.6144	5241.00	22.73	LGM	23.19
AITR1392-8HG-OHC3-C-MH2-ETW2-2	12.0080	1.5100	0.1470	0.0098	0.2470	0.6280	5.873	6.1134	1.6803	5275.00	23.76	LGM	23.29
AITR1392-8HG-OHC3-C-MH2-ETW2-3	12.0090	1.5110	0.1550	0.0103	0.2470	0.6280	5.874	6.1174	1.5935	5230.00	22.33	LGM	23.08
AITR1392-8HG-OHC3-C-MH2-ETW2-4	12.0110									NT			
Minimum	12.0040	1.5070	0.1450	0.0097	0.2470	0.6250	5.8700	6.0970	1.5935	5040.0000	22.2803		22.2664
Maximum	12.0130	1.5110	0.1550	0.0103	0.2475	0.6290	5.8783	6.1174	1.7069	5599.0000	25.5720		24.7196
Average	12.0080	1.5092	0.1494	0.0100	0.2471	0.6276	5.8739	6.1071	1.6543	5313.9444	23.5705		23.4733
Standard Deviation	0.0023	0.0011	0.0030	0.0002	0.0002	0.0011	0.0029	0.0051	0.0334	146.9231	0.8403		0.6508
Coefficient of Variation (%)	0.02	0.07	2.00	2.00	0.08	0.17	0.05	0.08	2.02	2.76	3.57		2.77
No. Specimens	24	18	18	18	18	18	18	18	18	18	18		18

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	FHT1	MH	CTD				

Test Group: AITR1392-8HG-FHT1-MH-CTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Filled-Hole Tension Layup 1 Condition: CTD #Plies: 12

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-FHT1-A-MH1-CTD-1	12.0000	1.5070	0.1200	0.0100	0.2509	6.0064	2.0908	6548.09	36.21	LGM	36.21
AITR1392-8HG-FHT1-A-MH1-CTD-2	12.0000	1.5080	0.1200	0.0100	0.2504	6.0224	2.0867	6246.57	34.52	LGM	34.52
AITR1392-8HG-FHT1-A-MH1-CTD-3	12.0000	1.5080	0.1200	0.0100	0.2509	6.0104	2.0908	6693.30	36.99	LGM	36.99
AITR1392-8HG-FHT1-A-MH1-CTD-4								NT			
AITR1392-8HG-FHT1-A-MH2-CTD-1	12.0000	1.5080	0.1190	0.0099	0.2480	6.0806	2.0840	6615.28	36.86	LGM	36.56
AITR1392-8HG-FHT1-A-MH2-CTD-2	12.0000	1.5070	0.1200	0.0100	0.2477	6.0840	2.0642	6360.87	35.17	LGM	35.17
AITR1392-8HG-FHT1-A-MH2-CTD-3	12.0000	1.5080	0.1190	0.0099	0.2486	6.0660	2.0891	6175.17	34.41	LGM	34.12
AITR1392-8HG-FHT1-A-MH2-CTD-4								NT			
AITR1392-8HG-FHT1-B-MH1-CTD-1	12.0000	1.5080	0.1170	0.0098	0.2500	6.0320	2.1368	6487.25	36.77	LGM	35.85
AITR1392-8HG-FHT1-B-MH1-CTD-2	12.0000	1.5080	0.1200	0.0100	0.2500	6.0320	2.0833	6458.20	35.69	LGM	35.69
AITR1392-8HG-FHT1-B-MH1-CTD-3	12.0000	1.5080	0.1190	0.0099	0.2501	6.0296	2.1017	6181.58	34.45	LGM	34.16
AITR1392-8HG-FHT1-B-MH1-CTD-4								NT			
AITR1392-8HG-FHT1-B-MH2-CTD-1	12.0000	1.5080	0.1200	0.0100	0.2501	6.0296	2.0842	6663.75	36.82	LGM	36.82
AITR1392-8HG-FHT1-B-MH2-CTD-2	12.0000	1.5080	0.1210	0.0101	0.2500	6.0320	2.0661	6380.41	34.97	LGM	35.26
AITR1392-8HG-FHT1-B-MH2-CTD-3	12.0000	1.5070	0.1210	0.0101	0.2510	6.0040	2.0744	6756.81	37.05	LGM	37.36
AITR1392-8HG-FHT1-B-MH2-CTD-4	12.0000	1.5070	0.1190	0.0099	0.2502	6.0232	2.1025	6203.97	34.59	LGM	34.31
AITR1392-8HG-FHT1-C-MH1-CTD-1	12.0000	1.5080	0.1130	0.0094	0.2500	6.0320	2.2124	6614.46	38.82	LGM	36.55
AITR1392-8HG-FHT1-C-MH1-CTD-2	12.0000	1.5080	0.1120	0.0093	0.2502	6.0272	2.2339	6682.81	39.57	LGM	36.93
AITR1392-8HG-FHT1-C-MH1-CTD-3	12.0000	1.5090	0.1130	0.0094	0.2500	6.0360	2.2124	5967.56	35.00	LGM	32.96
AITR1392-8HG-FHT1-C-MH1-CTD-4	12.0000	1.5070	0.1100	0.0092	0.2502	6.0232	2.2745	6698.51	40.41	LGM	37.04
AITR1392-8HG-FHT1-C-MH2-CTD-1	12.0000	1.5080	0.1160	0.0097	0.2520	5.9841	2.1724	6231.76	35.62	LGM	34.44
AITR1392-8HG-FHT1-C-MH2-CTD-2	12.0000	1.5070	0.1160	0.0097	0.2529	5.9589	2.1802	6185.80	35.39	LGM	34.21
AITR1392-8HG-FHT1-C-MH2-CTD-3	12.0000	1.5070	0.1150	0.0096	0.2506	6.0136	2.1791	6395.28	36.90	LGM	35.36
AITR1392-8HG-FHT1-C-MH2-CTD-4	12.0000	1.5070	0.1140	0.0095	0.2502	6.0232	2.1947	6468.50	37.65	LGM	35.77
Minimum	12.0000	1.5070	0.1100	0.0092	0.2477	5.9589	2.0642	5967.5590	34.4113		32.9554
Maximum	12.0000	1.5090	0.1210	0.0101	0.2529	6.0840	2.2745	6756.8110	40.4084		37.3635
Average	12.0000	1.5077	0.1173	0.0098	0.2502	6.0262	2.1340	6429.3306	36.3744		35.5370
Standard Deviation	0.0000	0.0006	0.0033	0.0003	0.0011	0.0281	0.0640	222.1759	1.6928		1.2313
Coefficient of Variation (%)	0.00	0.04	2.83	2.83	0.46	0.47	3.00	3.46	4.65		3.46
No. Specimens	21	21	21	21	21	21	21	21	21		21

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	8HG	FHT1	MH	RTD				

Test Group: AITR1392-8HG-FHT1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Filled-Hole Tension Layup 1 Condition: RTD #Plies: 12

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	**Normalized** Ultimate Strength,
AITR1392-8HG-FHT1-A-MH1-RTD-1	12.0000	1.5120	0.1170	0.0098	0.2509	6.0263	2.1444	5167.83	29.21	LGM	28.48
AITR1392-8HG-FHT1-A-MH1-RTD-2	12.0000	1.5090	0.1190	0.0099	0.2505	6.0240	2.1050	5260.19	29.29	LGM	29.05
AITR1392-8HG-FHT1-A-MH1-RTD-3	12.0000	1.5080	0.1190	0.0099	0.2502	6.0272	2.1025	5256.65	29.29	LGM	29.05
AITR1392-8HG-FHT1-A-MH1-RTD-4								NT			
AITR1392-8HG-FHT1-A-MH2-RTD-1	12.0000	1.5080	0.1160	0.0097	0.2476	6.0905	2.1345	5246.36	29.99	LGM	28.99
AITR1392-8HG-FHT1-A-MH2-RTD-2	12.0000	1.5080	0.1180	0.0098	0.2489	6.0587	2.1093	5310.50	29.84	LGM	29.35
AITR1392-8HG-FHT1-A-MH2-RTD-3	12.0000	1.5080	0.1120	0.0093	0.2488	6.0611	2.2214	5076.60	30.06	LGM	28.05
AITR1392-8HG-FHT1-A-MH2-RTD-4								NT			
Minimum	12.0000	1.5080	0.1120	0.0093	0.2476	6.0240	2.1025	5076.5990	29.2126		28.0537
Maximum	12.0000	1.5120	0.1190	0.0099	0.2509	6.0905	2.2214	5310.5010	30.0575		29.3463
Average	12.0000	1.5088	0.1168	0.0097	0.2495	6.0479	2.1362	5219.6885	29.6152		28.8286
Standard Deviation	0.0000	0.0016	0.0026	0.0002	0.0013	0.0267	0.0451	83.8192	0.3897		0.4716
Coefficient of Variation (%)	0.00	0.11	2.26	2.26	0.50	0.44	2.11	1.61	1.32		1.64
No. Specimens	6	6	6	6	6	6	6	6	6		6

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FHC1	MH	RTD						

Test Group: AITR1392-8HG-FHC1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Filled-Hole Compression Layup 1 Condition: RTD #Plies: 12

Test Method: MP1119 (ASTMD6742)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-FHC1-A-MH1-RTD-1	12.0030	1.5080	0.1149	0.0096	0.2510	0.6260	5.878	6.0080	2.1845	NT			
AITR1392-8HG-FHC1-A-MH1-RTD-2	11.9970	1.5080	0.1159	0.0097	0.2510	0.6280	5.868	6.0080	2.1657	NT			
AITR1392-8HG-FHC1-A-MH1-RTD-3	11.9990	1.5080	0.1153	0.0096	0.2508	0.6280	5.872	6.0128	2.1752	10429.00	59.98	AGF	57.63
AITR1392-8HG-FHC1-A-MH1-RTD-4	11.9980	1.5070	0.1160	0.0097	0.2508	0.6280	5.871	6.0088	2.1621	NT			
AITR1392-8HG-FHC1-A-MH2-RTD-1	12.0020	1.5080	0.1161	0.0097	0.2510	0.6270	5.872	6.0080	2.1619	9650.00	55.12	LGF	53.33
AITR1392-8HG-FHC1-A-MH2-RTD-2	12.0010	1.5070	0.1158	0.0097	0.2510	0.6270	5.87	6.0040	2.1675	9596.00	54.99	LGF	53.06
AITR1392-8HG-FHC1-A-MH2-RTD-3	11.9970	1.5080	0.1144	0.0095	0.2507	0.6270	5.868	6.0152	2.1914	9909.00	57.44	LGF	54.76
AITR1392-8HG-FHC1-A-MH2-RTD-4	12.0020	1.5080	0.1157	0.0096	0.2509	0.6280	5.875	6.0104	2.1685	NT			
Minimum	11.9970	1.5070	0.1144	0.0095	0.2507	0.6260	5.8680	6.0040	2.1619	9596.0000	54.9881		53.0635
Maximum	12.0030	1.5080	0.1161	0.0097	0.2510	0.6280	5.8780	6.0152	2.1914	10429.0000	59.9808		57.6315
Average	11.9999	1.5078	0.1155	0.0096	0.2509	0.6274	5.8718	6.0094	2.1721	9896.0000	56.8813		54.6949
Standard Deviation	0.0024	0.0005	0.0006	0.0000	0.0001	0.0007	0.0034	0.0034	0.0108	380.6897	2.3530		2.0945
Coefficient of Variation (%)	0.02	0.03	0.52	0.52	0.05	0.12	0.06	0.06	0.50	3.85	4.14		3.83
No. Specimens	8	8	8	8	8	8	8	8	8	4	4		4

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	FHC1	MH	ETW2						

Test Group: AITR1392-8HG-FHC1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Filled-Hole Compression Layup 1 Condition: ETW2 #Plies: 12

Test Method: MP1119 (ASTMD6742)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in	Width, in	Thickness, in	Cured Ply Thickness:	Diameter	Hole Edge-Side (f)	Hole Edge-End (g)	Width/ Diameter	Diameter/ Thickness	Ultimate Load, lb	Ultimate Strength, ksi	Failure Mode	Normalized Ultimate Strength,
AITR1392-8HG-FHC1-A-MH1-ETW2-1	12.0100	1.5090	0.1120	0.0093	0.2506	0.6270	5.874	6.0215	2.2375	6010.00	35.56	LGO	33.19
AITR1392-8HG-FHC1-A-MH1-ETW2-2	12.0080	1.5100	0.1150	0.0096	0.2510	0.6280	5.87	6.0159	2.1826	6816.00	39.25	LGF	37.62
AITR1392-8HG-FHC1-A-MH1-ETW2-3	12.0100	1.5090	0.1080	0.0090	0.2508	0.6270	5.873	6.0167	2.3222	FM		AAB	
AITR1392-8HG-FHC1-A-MH1-ETW2-4	12.0080	1.5090	0.1140	0.0095	0.2510	0.6280	5.87	6.0120	2.2018	FM		LGB	
AITR1392-8HG-FHC1-A-MH2-ETW2-1	12.0130	1.5080	0.1150	0.0096	0.2507	0.6270	5.875	6.0152	2.1800	FM		LWB	
AITR1392-8HG-FHC1-A-MH2-ETW2-2	12.0110	1.5080	0.1140	0.0095	0.2508	0.6270	5.874	6.0128	2.2000	6249.00	36.35	LGF	34.53
AITR1392-8HG-FHC1-A-MH2-ETW2-3	12.0060	1.5090	0.1150	0.0096	0.2508	0.6270	5.869	6.0167	2.1809	FM		LAT	
AITR1392-8HG-FHC1-A-MH2-ETW2-4										NT			
AITR1392-8HG-FHC1-B-MH1-ETW2-1	12.0130	1.5070	0.1190	0.0099	0.2502	0.6250	5.877	6.0232	2.1025	6858.00	38.24	LGF	37.92
AITR1392-8HG-FHC1-B-MH1-ETW2-2	12.0110	1.5080	0.1150	0.0096	0.2506	0.6270	5.876	6.0176	2.1791	6311.00	36.39	LGF	34.88
AITR1392-8HG-FHC1-B-MH1-ETW2-3	12.0110	1.5080	0.1180	0.0098	0.2503	0.6270	5.874	6.0248	2.1212	6803.00	38.23	LGF	37.59
AITR1392-8HG-FHC1-B-MH1-ETW2-4										NT			
AITR1392-8HG-FHC1-B-MH2-ETW2-1	12.0120	1.5090	0.1180	0.0098	0.2509	0.6270	5.875	6.0143	2.1263	6274.00	35.23	LGF	34.65
AITR1392-8HG-FHC1-B-MH2-ETW2-2	12.0110	1.5080	0.1180	0.0098	0.2505	0.6260	5.872	6.0200	2.1229	6461.00	36.31	LGF	35.70
AITR1392-8HG-FHC1-B-MH2-ETW2-3	12.0090	1.5080	0.1150	0.0096	0.2506	0.6260	5.871	6.0176	2.1791	6520.00	37.60	LGF	36.03
AITR1392-8HG-FHC1-B-MH2-ETW2-4										NT			
AITR1392-8HG-FHC1-C-MH1-ETW2-1	12.0050	1.5070	0.1170	0.0098	0.2508	0.6260	5.867	6.0088	2.1436	6200.00	35.16	LGF	34.28
AITR1392-8HG-FHC1-C-MH1-ETW2-2	12.0010	1.5090	0.1200	0.0100	0.2508	0.6260	5.877	6.0167	2.0900	6221.00	34.35	MGF	34.35
AITR1392-8HG-FHC1-C-MH1-ETW2-3	12.0060	1.5080	0.1160	0.0097	0.2506	0.6260	5.869	6.0176	2.1603	5972.00	34.14	LGF	33.00
AITR1392-8HG-FHC1-C-MH1-ETW2-4										NT			
AITR1392-8HG-FHC1-C-MH2-ETW2-1	12.0090	1.5090	0.1210	0.0101	0.2507	0.6250	5.871	6.0191	2.0719	6426.00	35.19	LGF	35.49
AITR1392-8HG-FHC1-C-MH2-ETW2-2	12.0120	1.5090	0.1200	0.0100	0.2501	0.6260	5.876	6.0336	2.0842	7823.00	43.20	LGF	43.20
AITR1392-8HG-FHC1-C-MH2-ETW2-3	12.0120	1.5090	0.1180	0.0098	0.2505	0.6220	5.874	6.0240	2.1229	7464.00	41.92	LGF	41.22
AITR1392-8HG-FHC1-C-MH2-ETW2-4										NT			
Minimum	12.0010	1.5070	0.1080	0.0090	0.2501	0.6220	5.8670	6.0088	2.0719	5972.0000	34.1398		33.0018
Maximum	12.0130	1.5100	0.1210	0.0101	0.2510	0.6280	5.8770	6.0336	2.3222	7823.0000	43.2019		43.2019
Average	12.0094	1.5085	0.1162	0.0097	0.2506	0.6263	5.8728	6.0183	2.1584	6560.5333	37.1426		36.2441
Standard Deviation	0.0031	0.0008	0.0031	0.0003	0.0002	0.0013	0.0029	0.0055	0.0601	520.1929	2.6605		2.8686
Coefficient of Variation (%)	0.03	0.05	2.68	2.68	0.10	0.21	0.05	0.09	2.79	7.93	7.16		7.91
No. Specimens	19	19	19	19	19	19	19	19	19	15	15		15

Notes:
NT=Not Tested or Excluded
NR=No Result
NA=Not Applicable
FM=Failure Mode Unacceptable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition
	AITR	1392	8HG	PB1	MH	RTD

Test Group: AITR1392-8HG-PB1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Single Shear Pin Bearing Layup 1 Condition: RTD #Plies: 12

Test Method: MP1120 (ASTMD5961)

ACG, Inc.
Material & Process
Laboratory Report

Normalized

Specimen ID	Width, in.	Thickness, in.	Diameter	Hole Center-End (e)	Hole Edge-Side (g)	Hole Edge-End (f)	Hole-Edge/ Diameter (e/D)	Width/ Diameter	Diameter/ Thickness	Strength, ksi Initial Peak	Ultimate	2% Offset	4% Offset	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
AITR1392-8HG-PB1-A-MH1-RTD-1	1.5100	0.1210	0.2503	0.7514	0.6217	0.6262	3.0018	6.033	2.069	71.04	98.20	64.54	81.36	0.0101	99.01	65.07
AITR1392-8HG-PB1-A-MH1-RTD-2	1.5100	0.1220	0.2500	0.7512	0.6217	0.6262	3.0048	6.040	2.049	74.15	102.98	67.17	80.41	0.0102	104.70	68.29
AITR1392-8HG-PB1-A-MH1-RTD-3	1.5100	0.1180	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.125	68.87	93.90	56.35	68.77	0.0098	92.34	55.41
AITR1392-8HG-PB1-A-MH1-RTD-4	1.5100	0.1200	0.2501	0.7513	0.6217	0.6262	3.0038	6.038	2.084	70.16	97.69	68.32	82.64	0.0100	97.69	68.32
AITR1392-8HG-PB1-A-MH2-RTD-1	1.5100	0.1210	0.2510	0.7517	0.6217	0.6262	2.9948	6.016	2.074	71.70	101.28	70.57	85.00	0.0101	102.12	71.16
AITR1392-8HG-PB1-A-MH2-RTD-2	1.5100	0.1200	0.2503	0.7514	0.6217	0.6262	3.0018	6.033	2.086	71.14	90.86	67.92	76.35	0.0100	90.86	67.92
AITR1392-8HG-PB1-A-MH2-RTD-3	1.5100	0.1200	0.2502	0.7513	0.6217	0.6262	3.0028	6.035	2.085	72.12	96.49	70.61	81.95	0.0100	96.49	70.61
AITR1392-8HG-PB1-A-MH2-RTD-4	1.5100	0.1190	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.108	71.37	95.89	80.22	88.09	0.0099	95.10	79.55
AITR1392-8HG-PB1-B-MH1-RTD-1	1.5100	0.1100	0.2509	0.7517	0.6217	0.6262	2.9958	6.018	2.281	70.38	88.77	68.36	63.71	0.0092	81.37	62.66
AITR1392-8HG-PB1-B-MH1-RTD-2	1.5100	0.1220	0.2510	0.7517	0.6217	0.6262	2.9948	6.016	2.057	79.92	106.13	77.86	91.83	0.0102	107.90	79.15
AITR1392-8HG-PB1-B-MH1-RTD-3	1.5100	0.1190	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.108	73.65	101.29	80.38	93.67	0.0099	100.45	79.71
AITR1392-8HG-PB1-B-MH1-RTD-4	1.5100	0.1200	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.090	NT				0.0100		
AITR1392-8HG-PB1-B-MH2-RTD-1	1.5100	0.1220	0.2519	0.7522	0.6217	0.6262	2.9859	5.994	2.065	68.70	97.59	68.60	85.74	0.0102	99.21	69.75
AITR1392-8HG-PB1-B-MH2-RTD-2	1.5100	0.1210	0.2513	0.7519	0.6217	0.6262	2.9918	6.009	2.077	72.34	97.74	72.74	81.96	0.0101	98.55	73.35
AITR1392-8HG-PB1-B-MH2-RTD-3	1.5100	0.1220	0.2511	0.7518	0.6217	0.6262	2.9938	6.014	2.058	71.32	107.89	63.65	77.58	0.0102	109.68	64.71
AITR1392-8HG-PB1-B-MH2-RTD-4	1.5100	0.1200	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.090	NT				0.0100		
AITR1392-8HG-PB1-C-MH1-RTD-1	1.5100	0.1210	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.073	67.66	96.02	62.37	75.44	0.0101	96.82	62.89
AITR1392-8HG-PB1-C-MH1-RTD-2	1.5100	0.1210	0.2512	0.7518	0.6217	0.6262	2.9928	6.011	2.076	70.39	94.59	62.49	69.70	0.0101	95.38	63.01
AITR1392-8HG-PB1-C-MH1-RTD-3	1.5100	0.1190	0.2500	0.7512	0.6217	0.6262	3.0048	6.040	2.101	67.22	97.85	59.52	65.18	0.0099	97.03	59.03
AITR1392-8HG-PB1-C-MH1-RTD-4	1.5100	0.1200	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.090	NT				0.0100		
AITR1392-8HG-PB1-C-MH2-RTD-1	1.5100	0.1170	0.2506	0.7515	0.6217	0.6262	2.9988	6.026	2.142	75.80	102.05	67.41	85.20	0.0098	99.49	65.73
AITR1392-8HG-PB1-C-MH2-RTD-2	1.5100	0.1180	0.2510	0.7517	0.6217	0.6262	2.9948	6.016	2.127	68.07	102.91	65.38	81.68	0.0098	101.20	64.29
AITR1392-8HG-PB1-C-MH2-RTD-3	1.5100	0.1180	0.2510	0.7517	0.6217	0.6262	2.9948	6.016	2.127	72.76	102.03	65.13	79.55	0.0098	100.33	64.04
AITR1392-8HG-PB1-C-MH2-RTD-4	1.5100	0.1200	0.2508	0.7516	0.6217	0.6262	2.9968	6.021	2.090	NT				0.0100		
Minimum	1.5100	0.1100	0.2500	0.7512	0.6217	0.6262	2.9859	5.9944	2.0492	67.2200	88.7713	56.3460	63.7060	0.0092	81.3737	55.4069
Maximum	1.5100	0.1220	0.2519	0.7522	0.6217	0.6262	3.0048	6.0400	2.2809	79.9150	107.8860	80.3810	93.6710	0.0102	109.6841	79.7112
Average	1.5100	0.1196	0.2508	0.7516	0.6217	0.6262	2.9972	6.0217	2.0971	71.4377	98.6077	67.9800	79.7901	0.0100	98.2870	67.7331
Standard Deviation	0.0000	0.0025	0.0004	0.0002	0.0000	0.0000	0.0044	0.0106	0.0459	2.9719	4.7864	6.2959	8.1214	0.0002	6.0741	6.5488
Coefficient of Variation (%)	0.00	2.07	0.18	0.03	0.00	0.00	0.15	0.18	2.19	4.16	4.85	9.26	10.18	2.07	6.18	9.67
No. Specimens	24	24	24	24	24	24	24	24	24	20	20	20	20	24	20	20

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error

FORM MP1120 (ASTMD5961)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition
	AITR	1392	8HG	PB1	MH	ETW2

Test Group: AITR1392-8HG-PB1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Single Shear Pin Bearing Layup 1 Condition: ETW2 #Plies: 12

Test Method: MP1120 (ASTMD5961)

ACG, Inc. Material & Process Laboratory Report

Normalized

Specimen ID	Width, in.	Thickness, in.	Diameter	Hole Center-End (e)	Hole Edge-Side (g)	Hole Edge-End (f)	Hole-Edge/ Diameter (e/D)	Width/ Diameter	Diameter/ Thickness	Strength, ksi Initial Peak	Ultimate	2% Offset	4% Offset	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
AITR1392-8HG-PB1-A-MH1-ETW2-1	1.5090	0.1200	0.2503	0.7582	0.6240	0.6330	3.0290	6.029	2.086	44.52	64.72	40.36	50.46	0.0100	64.72	40.36
AITR1392-8HG-PB1-A-MH1-ETW2-2	1.5110	0.1200	0.2506	0.7543	0.6210	0.6290	3.0100	6.030	2.088	44.47	62.95	39.94	47.41	0.0100	62.95	39.94
AITR1392-8HG-PB1-A-MH1-ETW2-3	1.5100	0.1200	0.2504	0.7542	0.6240	0.6290	3.0120	6.030	2.087	46.83	64.76	49.68	58.50	0.0100	64.76	49.68
AITR1392-8HG-PB1-A-MH1-ETW2-4	1.5100	0.1180	0.2503	0.7532	0.6250	0.6280	3.0090	6.033	2.121	47.46	75.23	48.19	58.02	0.0098	73.98	47.38
AITR1392-8HG-PB1-A-MH2-ETW2-1	1.5090	0.1180	0.2509	0.7505	0.6210	0.6250	2.9910	6.014	2.126	54.58	69.17	56.05	64.86	0.0098	68.02	55.12
AITR1392-8HG-PB1-A-MH2-ETW2-2	1.5090	0.1190	0.2504	0.7542	0.6210	0.6290	3.0120	6.026	2.104	48.67	65.98	48.68	59.58	0.0099	65.43	48.27
AITR1392-8HG-PB1-A-MH2-ETW2-3	1.5100	0.1150	0.2508	0.7534	0.6210	0.6280	3.0040	6.021	2.181	47.01	66.40	48.60	61.59	0.0096	63.63	46.58
AITR1392-8HG-PB1-A-MH2-ETW2-4	1.5100	0.1200	0.2503	0.7532	0.6210	0.6280	3.0090	6.033	2.086	NT				0.0100		
AITR1392-8HG-PB1-B-MH1-ETW2-1	1.5090	0.1228	0.2508	0.7494	0.6200	0.6240	2.9880	6.017	2.042	46.34	61.82	49.67	56.71	0.0102	63.26	50.83
AITR1392-8HG-PB1-B-MH1-ETW2-2	1.5100	0.1222	0.2509	0.7495	0.6210	0.6240	2.9870	6.018	2.053	46.42	59.85	47.51	57.61	0.0102	60.95	48.39
AITR1392-8HG-PB1-B-MH1-ETW2-3	1.5100	0.1237	0.2502	0.7491	0.6200	0.6240	2.9940	6.035	2.023	47.85	64.65	47.55	54.83	0.0103	66.65	49.02
AITR1392-8HG-PB1-B-MH1-ETW2-4	1.5090	0.1189	0.2506	0.7483	0.6230	0.6230	2.9860	6.022	2.108	48.24	65.38	50.60	58.10	0.0099	64.78	50.14
AITR1392-8HG-PB1-B-MH2-ETW2-1	1.5100	0.1184	0.2505	0.7553	0.6220	0.6300	3.0150	6.028	2.116	49.17	65.07	47.06	52.52	0.0099	64.20	46.43
AITR1392-8HG-PB1-B-MH2-ETW2-2	1.5100	0.1198	0.2508	0.7414	0.6270	0.6160	2.9561	6.021	2.093	46.16	64.63	44.43	50.94	0.0100	64.53	44.36
AITR1392-8HG-PB1-B-MH2-ETW2-3	1.5100	0.1222	0.2505	0.7303	0.6260	0.6050	2.9152	6.028	2.050	NT				0.0102		
AITR1392-8HG-PB1-B-MH2-ETW2-4	1.5100	0.1224	0.2512	0.7546	0.6200	0.6290	3.0040	6.011	2.052	43.82	64.49	45.50	57.23	0.0102	65.78	46.41
AITR1392-8HG-PB1-C-MH1-ETW2-1	1.5100	0.1199	0.2504	0.7542	0.6220	0.6290	3.0120	6.030	2.088	44.21	65.45	44.00	56.13	0.0100	65.40	43.96
AITR1392-8HG-PB1-C-MH1-ETW2-2	1.5100	0.1204	0.2506	0.7553	0.6200	0.6300	3.0140	6.026	2.081	44.65	67.71	48.65	59.73	0.0100	67.94	48.81
AITR1392-8HG-PB1-C-MH1-ETW2-3	1.5100	0.1151	0.2510	0.7545	0.6200	0.6290	3.0060	6.016	2.181	47.80	71.62	50.09	66.19	0.0096	68.69	48.04
AITR1392-8HG-PB1-C-MH1-ETW2-4			0.0000							NT				#VALUE!		
AITR1392-8HG-PB1-C-MH2-ETW2-1	1.5090	0.1176	0.2507	0.7534	0.6210	0.6280	3.0050	6.019	2.132	46.82	64.34	48.52	59.33	0.0098	63.06	47.55
AITR1392-8HG-PB1-C-MH2-ETW2-2	1.5100	0.1192	0.2505	0.7493	0.6210	0.6240	2.9910	6.028	2.102	46.47	64.10	50.27	60.41	0.0099	63.67	49.94
AITR1392-8HG-PB1-C-MH2-ETW2-3	1.5100	0.1198	0.2504	0.7542	0.6190	0.6290	3.0120	6.030	2.090	46.49	66.70	42.42	54.06	0.0100	66.59	42.35
AITR1392-8HG-PB1-C-MH2-ETW2-4	1.5080	0.1126	0.2506	0.7543	0.6190	0.6290	3.0100	6.018	2.226	NT				0.0094		
Minimum	1.5080	0.1126	0.0000	0.7303	0.6190	0.6050	2.9152	6.0111	2.0226	43.8170	59.8500	39.9440	47.4090	#VALUE!	60.9473	39.9440
Maximum	1.5110	0.1237	0.2512	0.7582	0.6270	0.6330	3.0290	6.0352	2.2256	54.5750	75.2318	56.0510	66.1880	#VALUE!	73.9779	55.1168
Average	1.5097	0.1193	0.2402	0.7515	0.6217	0.6262	2.9987	6.0244	2.1007	46.8987	65.7522	47.3885	57.2094	#VALUE!	65.4496	47.1774
Standard Deviation	0.0006	0.0026	0.0512	0.0058	0.0022	0.0058	0.0234	0.0068	0.0472	2.3609	3.3309	3.7808	4.6352	#VALUE!	2.7744	3.6321
Coefficient of Variation (%)	0.04	2.19	21.30	0.77	0.35	0.92	0.78	0.11	2.24	5.03	5.07	7.98	8.10	#VALUE!	4.24	7.70
No. Specimens	23	23	24	23	23	23	23	23	23	20	20	20	20	23	20	20

Notes:

NT=Not Tested

NR=No Result

NA=Not Applicable

GE=Gage Error

FORM MP1120 (ASTMD5961)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	ILT1	MH	RTD						

Test Group: AITR1392-8HG-ILT1-MH-RTD

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Interlaminar Tension Layup 1 Condition: RTD #Plies: 16

Test Method: MP1122 (ASTMD6415)

ACG, Inc.
Material & Process
Laboratory Report

Normalized

Specimen ID	ASTM D6415 Spec. Dimensions*					Ultimate (peak)**						Failure	Cured Ply	Ultimate
	Thick, In.	Width, in.	r_{inner}, in	r_{outer}, in	$Angle_i$, Deg	d_y, in	Φ, deg	Δ, in	P, lb	CBS, in-lb/in	σ_r, ksi	Mode	Thickness	Strength, ksi
AITR1392-8HG-ILT1-A-MH1-RTD-1	0.1650	1.009	0.2500	0.4150	89.0000	0.6392	11.9468	0.596	771.000	240.08	6.78	LLT	0.0103	6.99
AITR1392-8HG-ILT1-A-MH1-RTD-2	0.1700	1.008	0.2500	0.4200	89.0000	0.6626	13.6610	0.580	771.000	250.26	6.81	ILT	0.0106	7.24
AITR1392-8HG-ILT1-A-MH1-RTD-3	0.1630	1.000	0.2500	0.4130	89.0000	0.6329	11.5251	0.599	848.000	263.65	7.55	ILT	0.0102	7.69
AITR1392-8HG-ILT1-A-MH1-RTD-4	0.1620	1.004	0.2500	0.4120	89.0000	0.6246	10.8314	0.606	921.000	280.73	8.10	ILT	0.0101	8.20
AITR1392-8HG-ILT1-A-MH1-RTD-5	0.1680	1.008	0.2500	0.4180	89.0000	0.6338	11.2116	0.606	901.000	276.41	7.63	ILT	0.0105	8.02
AITR1392-8HG-ILT1-A-MH1-RTD-6	0.1680	1.008	0.2500	0.4180	90.0000	0.6498	12.6719	0.605	898.000	284.78	7.87	ILT	0.0105	8.26
AITR1392-8HG-ILT1-A-MH1-RTD-7	0.1650	1.008	0.2500	0.4150	89.0000	0.6269	10.8063	0.608	907.000	275.47	7.77	LLT	0.0103	8.02
Minimum	0.1620	1.0000	0.2500	0.4120	89.0000	0.6246	10.8063	0.5795	771.0000	240.08	6.78		0.0101	6.9876
Maximum	0.1700	1.0087	0.2500	0.4200	90.0000	0.6626	13.6610	0.6082	921.0000	284.78	8.10		0.0106	8.2590
Average	0.1659	1.0064	0.2500	0.4159	89.1429	0.6386	11.8077	0.5999	859.5714	267.34	7.50		0.0104	7.7734
Standard Deviation	0.0029	0.0033	0.0000	0.0029	0.3780	0.0135	1.0482	0.0100	64.6010	16.74	0.51		0.0002	0.4907
Coefficient of Variation (%)	1.76	0.32	0.00	0.70	0.42	2.11	8.88	1.66	7.52	6.26	6.85		1.76	6.31
No. Specimens	7	7	7	7	7	7	7	7	7	7	7		7	7

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	8HG	ILT1	MH	ETW2						

Test Group: AITR1392-8HG-ILT1-MH-ETW2

Material: **MTM45-1/GF0103-35%RW** Normalization: NA Cured Ply Thickness: 0.01

Test Type: Interlaminar Tension Layup 1 Condition: ETW2 #Plies: 16

Test Method: MP1122 (ASTMD6415)

ACG, Inc.
Material & Process
Laboratory Report

Normalized

Specimen ID	ASTM D6415 Spec. Dimensions*					Ultimate (peak)**						Failure	Cured Ply	Ultimate
	Thick, In.	Width, in.	r_{inner}, in	r_{outer}, in	$Angle_i$, Deg	d_y, in	Φ, deg	Δ, in	P, lb	CBS, in-lb/in	σ_r, ksi	Mode	Thickness	Strength, ksi
AITR1392-8HG-ILT1-A-MH1-ETW2-1	0.1780	1.009	0.2500	0.4280	90.0000	1.0024	35.2970	0.266	134.000	80.55	2.08	ILT	0.0111	2.31
AITR1392-8HG-ILT1-A-MH1-ETW2-2	0.1820	1.009	0.2500	0.4320	90.0000	0.9925	34.6206	0.282	133.000	78.35	1.96	ILT	0.0114	2.23
AITR1392-8HG-ILT1-A-MH1-ETW2-3	0.1780	1.002	0.2500	0.4280	90.0000	0.9645	33.4299	0.304	153.000	86.96	2.24	ILT	0.0111	2.49
AITR1392-8HG-ILT1-A-MH1-ETW2-4	0.1720	1.009	0.2500	0.4220	90.0000	0.9640	33.7115	0.296	150.000	85.10	2.28	ILT	0.0108	2.46
AITR1392-8HG-ILT1-A-MH1-ETW2-5	0.1810	1.005	0.2500	0.4310	90.0000	0.9951	34.7957	0.278	131.000	77.88	1.97	ILT	0.0113	2.22
AITR1392-8HG-ILT1-A-MH1-ETW2-6	0.1740	1.005	0.2500	0.4240	90.0000	0.9872	34.7586	0.276	132.000	77.99	2.07	ILT	0.0109	2.25
AITR1392-8HG-ILT1-A-MH1-ETW2-7	0.1860	1.009	0.2500	0.4360	91.0000	1.0046	35.0129	0.291	148.000	88.61	2.16	ILT	0.0116	2.52
Minimum	0.1720	1.0020	0.2500	0.4220	90.0000	0.9640	33.4299	0.2661	131.0000	77.88	0.00		0.0108	2.2244
Maximum	0.1860	1.0090	0.2500	0.4360	91.0000	1.0046	35.2970	0.3040	153.0000	88.61	0.00		0.0116	2.5161
Average	0.1787	1.0069	0.2500	0.4287	90.1429	0.9872	34.5180	0.2846	140.1429	82.21	0.00		0.0112	2.3540
Standard Deviation	0.0048	0.0029	0.0000	0.0048	0.3780	0.0167	0.6870	0.0131	9.6855	4.58	0.00		0.0003	0.1295
Coefficient of Variation (%)	2.68	0.28	0.00	1.12	0.42	1.69	1.99	4.59	6.91	5.57	#DIV/0!		2.68	5.50
No. Specimens	7	7	7	7	7	7	7	7	7	7	7		7	7

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable

Laminate Compression After Impact Properties (CAI) -- (RTD) Summary

Specimen Number	ACG Code	ACG Batch #	ACG Cure Cycle	Prepreg Lot #	Cure Cycle Batch #	Measured Impact Energy (in-lbf)	Strength [ksi]	Avg. Specimen Thickn. [in]	Failure Mode	Normalizing: Cured Ply Thickness	Normalizing: Strength, ksi
CDKA111A	AITR1392-8HG-CAI1-A-MH1-RTD-1	A	MH1	1	1	249.21	23.081	0.158	LGM/ LAB	0.00985	22.734
CDKA112A	AITR1392-8HG-CAI1-A-MH1-RTD-2	A	MH1	1	1	248.98	22.681	0.165	LGM/LAB	0.010333333	23.438
CDKA113A	AITR1392-8HG-CAI1-A-MH1-RTD-3	A	MH1	1	1	249.24	21.013	0.163	LAB	0.010166667	21.363
CDKA114A	AITR1392-8HG-CAI1-A-MH1-RTD-4	A	MH1	1	1	249.30	22.845	0.164	LGM/ LAB	0.010252083	23.421
CDKA115A	AITR1392-8HG-CAI1-A-MH1-RTD-5	A	MH1	1	1	248.74	22.725	0.160	LGM/ LAB	0.010028125	22.789
CDKA116A	AITR1392-8HG-CAI1-A-MH1-RTD-6	A	MH1	1	1	249.19	22.656	0.160	LAB	0.009982292	22.616
CDKA117A	AITR1392-8HG-CAI1-A-MH1-RTD-7	A	MH1	1	1	249.30	22.882	0.164	LGM/ LAB	0.010244792	23.442

Average	**22.555**
Standard Dev.	**0.695**
Coeff. of Var. [%]	**3.083**
Min.	**21.013**
Max.	**23.081**
Number of Spec.	**7**