Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LT	LH	CTD						

Test Group: AITR1392-ASU1-LT-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Tensile Condition: CTD

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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LT-B-LH1-CTD-1	10.067	1.0058	0.0869	0.0054	NT		288.704	284.986	19.91	19.650	NT
AITR1392-ASU1-LT-B-LH1-CTD-2	10.067	1.0054	0.0815	0.0051	NT		292.094	270.519	20.36	18.853	NT
AITR1392-ASU1-LT-B-LH1-CTD-3	10.071	1.0065	0.0841	0.0053	NT		293.000	279.904	19.71	18.830	NT
AITR1392-ASU1-LT-B-LH1-CTD-4	10.070	1.0058	0.0822	0.0051	NT		270.642	252.805	20.40	19.057	NT
AITR1392-ASU1-LT-B-LH1-CTD-5	10.070	1.0069	0.0861	0.0054	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-LT-B-LH2-CTD-1	10.029	1.0069	0.0827	0.0052	NT		289.361	271.824	19.99	18.781	NT
AITR1392-ASU1-LT-B-LH2-CTD-2	10.034	1.0079	0.0836	0.0052	NT		266.012	252.812	19.67	18.690	NT
AITR1392-ASU1-LT-B-LH2-CTD-3	10.029	1.0066	0.0833	0.0052	NT		282.884	267.882	19.28	18.261	NT
AITR1392-ASU1-LT-B-LH2-CTD-4	10.027	1.0070	0.0845	0.0053	NT		283.113	271.852	20.12	19.318	NT
AITR1392-ASU1-LT-B-LH2-CTD-5	10.025	1.0063	0.0810	0.0051	NT		NT	NT	NT	NT	NT
Minimum	10.0250	1.0054	0.0810	0.0051			266.012	252.805	19.284	18.261	
Maximum	10.0710	1.0079	0.0869	0.0054			293.000	284.986	20.402	19.650	
Average	10.0487	1.0065	0.0836	0.0052			283.226	269.073	19.930	18.930	
Standard Deviation	0.0212	0.0007	0.0019	0.0001			9.976	11.454	0.374	0.419	
Coefficient of Variation (%)	0.21	0.07	2.24	2.24			3.52	4.26	1.88	2.21	
No. Specimens	10	10	10	10			8	8	8	8	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LT	LH	RTD						

Test Group: AITR1392-ASU1-LT-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Tensile Condition: RTD

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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LT-B-LH1-RTD-1	10.062	1.0063	0.0859	0.0054	NT		280.941	274.130	19.08	18.617	NT
AITR1392-ASU1-LT-B-LH1-RTD-2	10.061	1.0060	0.0842	0.0053	NT		264.244	252.733	19.47	18.618	NT
AITR1392-ASU1-LT-B-LH1-RTD-3	10.066	1.0067	0.0849	0.0053	NT		280.811	271.025	19.27	18.599	NT
AITR1392-ASU1-LT-B-LH1-RTD-4	10.067	1.0074	0.0844	0.0053	NT		279.116	267.592	19.37	18.570	NT
AITR1392-ASU1-LT-B-LH1-RTD-5	10.068	1.0063	0.0833	0.0052	NT		266.996	252.736	NT	NT	NT
AITR1392-ASU1-LT-B-LH2-RTD-1	10.024	1.0066	0.0825	0.0052	NT		255.087	239.241	21.22	19.899	NT
AITR1392-ASU1-LT-B-LH2-RTD-2	10.026	1.0074	0.0860	0.0054	NT		279.177	272.726	19.26	18.819	NT
AITR1392-ASU1-LT-B-LH2-RTD-3	10.030	1.0071	0.0822	0.0051	NT		269.690	251.915	19.36	18.081	NT
AITR1392-ASU1-LT-B-LH2-RTD-4	10.029	1.0076	0.0844	0.0053	NT		NT	NT	19.46	18.667	NT
AITR1392-ASU1-LT-B-LH2-RTD-5	10.030	1.0081	0.0809	0.0051	NT		264.748	243.488	NT	NT	NT
Minimum	10.0240	1.0060	0.0809	0.0051			255.087	239.241	19.080	18.081	
Maximum	10.0681	1.0081	0.0860	0.0054			280.941	274.130	21.217	19.899	
Average	10.0462	1.0069	0.0839	0.0052			271.201	258.399	19.561	18.734	
Standard Deviation	0.0196	0.0007	0.0016	0.0001			9.241	13.192	0.681	0.516	
Coefficient of Variation (%)	0.20	0.07	1.93	1.93			3.41	5.11	3.48	2.76	
No. Specimens	10	10	10	10			9	9	8	8	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LT	LH	ETW2						

Test Group: AITR1392-ASU1-LT-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal 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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LT-B-LH1-ETW2-1	10.070	1.0087	0.0834	0.0052	NT		264.441	250.517	21.54	20.410	NT
AITR1392-ASU1-LT-B-LH1-ETW2-2	10.067	1.0087	0.0848	0.0053	NT		238.345	229.678	22.69	21.861	NT
AITR1392-ASU1-LT-B-LH1-ETW2-3	10.073	1.0052	0.0879	0.0055	NT		249.074	248.885	22.72	22.706	NT
AITR1392-ASU1-LT-B-LH1-ETW2-4	10.070	1.0095	0.0850	0.0053	NT		235.249	227.318	21.82	21.086	NT
AITR1392-ASU1-LT-B-LH1-ETW2-5	10.073	1.0089	0.0857	0.0054	NT		246.458	240.109	NT	NT	NT
AITR1392-ASU1-LT-B-LH2-ETW2-1	10.032	1.0095	0.0852	0.0053	NT		262.459	254.207	23.45	22.717	NT
AITR1392-ASU1-LT-B-LH2-ETW2-2	10.028	1.0090	0.0835	0.0052	NT		259.480	246.113	GE	GE	NT
AITR1392-ASU1-LT-B-LH2-ETW2-3	10.039	1.0088	0.0848	0.0053	NT		240.892	232.133	21.06	20.294	NT
AITR1392-ASU1-LT-B-LH2-ETW2-4	10.039	1.0094	0.0844	0.0053	NT		NT	NT	GE	GE	NT
AITR1392-ASU1-LT-B-LH2-ETW2-5	10.045	1.0089	0.0836	0.0052	NT		241.961	229.954	NT	NT	NT
Minimum	10.0280	1.0052	0.0834	0.0052			235.249	227.318	21.060	20.294	
Maximum	10.0734	1.0095	0.0879	0.0055			264.441	254.207	23.454	22.717	
Average	10.0535	1.0087	0.0848	0.0053			248.706	239.879	22.215	21.512	
Standard Deviation	0.0185	0.0013	0.0013	0.0001			10.914	10.361	0.889	1.084	
Coefficient of Variation (%)	0.18	0.12	1.58	1.58			4.39	4.32	4.00	5.04	
No. Specimens	10	10	10	10			9	9	6	6	

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LC	LH	RTD						

Test Group: AITR1392-ASU1-LC-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal 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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LC-B-LH1-RTD-1	5.508	0.5070	0.0843	0.0053	NT		197.968	189.720	17.58	16.848	0.312
AITR1392-ASU1-LC-B-LH1-RTD-2	5.507	0.5076	0.0833	0.0052	NT		179.252	169.644	17.44	16.505	0.300
AITR1392-ASU1-LC-B-LH1-RTD-3	5.507	0.5076	0.0843	0.0053	NT		167.362	160.262	16.26	15.566	0.315
AITR1392-ASU1-LC-B-LH1-RTD-4	5.506	0.5074	0.0828	0.0052	NT		192.528	181.115	17.77	16.713	0.293
AITR1392-ASU1-LC-B-LH1-RTD-5	5.506	0.5073	0.0839	0.0052	NT		187.958	179.272	17.19	16.395	0.307
AITR1392-ASU1-LC-B-LH2-RTD-1	5.508	0.5076	0.0837	0.0052	NT		182.702	173.670	16.55	15.735	0.261
AITR1392-ASU1-LC-B-LH2-RTD-2	5.508	0.5076	0.0855	0.0053	NT		182.576	177.320	NT	NT	NT
AITR1392-ASU1-LC-B-LH2-RTD-3	5.508	0.5066	0.0834	0.0052	NT		182.355	172.892	16.56	15.697	0.260
AITR1392-ASU1-LC-B-LH2-RTD-4	5.508	0.5068	0.0849	0.0053	NT		186.082	179.527	NT	NT	NT
AITR1392-ASU1-LC-B-LH2-RTD-5	5.506	0.5072	0.0873	0.0055	NT		NT	NT	16.25	16.110	0.294
Minimum	5.5060	0.5066	0.0828	0.0052			167.362	160.262	16.245	15.566	0.2600
Maximum	5.5082	0.5076	0.0873	0.0055			197.968	189.720	17.766	16.848	0.3150
Average	5.5072	0.5073	0.0843	0.0053			184.309	175.936	16.948	16.196	0.2928
Standard Deviation	0.0009	0.0004	0.0013	0.0001			8.608	8.234	0.615	0.492	0.0214
Coefficient of Variation (%)	0.02	0.07	1.54	1.54			4.67	4.68	3.63	3.04	7.31
No. Specimens	10	10	10	10			9	9	8	8	8

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LC	LH	ETW						

Test Group: AITR1392-ASU1-LC-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Compression Condition: ETW

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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LC-B-LH1-ETW-1	5.509	0.5076	0.0846	0.0053	NT		120.494	115.884	18.95	18.223	0.355
AITR1392-ASU1-LC-B-LH1-ETW-2	5.507	0.5071	0.0842	0.0053	NT		136.041	130.218	18.95	18.143	0.327
AITR1392-ASU1-LC-B-LH1-ETW-3	5.506	0.5076	0.0834	0.0052	NT		160.007	151.582	19.90	18.855	0.434
AITR1392-ASU1-LC-B-LH1-ETW-4	5.509	0.5073	0.0840	0.0053	NT		131.582	125.651	18.49	17.658	0.364
AITR1392-ASU1-LC-B-LH1-ETW-5	5.507	0.5079	0.0841	0.0053	NT		134.957	129.027	NT	NT	NT
AITR1392-ASU1-LC-B-LH2-ETW-1	5.498	0.5064	0.0875	0.0055	NT		128.971	128.238	18.30	18.199	0.414
AITR1392-ASU1-LC-B-LH2-ETW-2	5.508	0.5076	0.0841	0.0053	NT		135.952	129.876	18.78	17.937	0.361
AITR1392-ASU1-LC-B-LH2-ETW-3	5.508	0.5070	0.0840	0.0053	NT		145.833	139.259	17.91	17.099	0.275
AITR1392-ASU1-LC-B-LH2-ETW-4	5.509	0.5068	0.0857	0.0054	NT		155.632	151.565	18.34	17.861	0.306
AITR1392-ASU1-LC-B-LH2-ETW-5	5.508	0.5072	0.0853	0.0053	NT		154.281	149.547	NT	NT	NT
Minimum	5.4981	0.5064	0.0834	0.0052			120.494	115.884	17.906	17.099	0.2750
Maximum	5.5086	0.5079	0.0875	0.0055			160.007	151.582	19.903	18.855	0.4340
Average	5.5067	0.5073	0.0847	0.0053			140.375	135.085	18.703	17.997	0.3545
Standard Deviation	0.0032	0.0004	0.0012	0.0001			12.960	12.304	0.602	0.506	0.0527
Coefficient of Variation (%)	0.06	0.08	1.41	1.41			9.23	9.11	3.22	2.81	14.86
No. Specimens	10	10	10	10			10	10	8	8	8

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	LC	LH	ETW2						

Test Group: AITR1392-ASU1-LC-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Compression Condition: ETW2

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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LC-B-LH1-ETW2-1	5.507	0.5074	0.0853	0.0053	NT		NT	NT	18.65	18.082	0.368
AITR1392-ASU1-LC-B-LH1-ETW2-2	5.508	0.5076	0.0851	0.0053	NT		NT	NT	18.27	17.671	0.344
AITR1392-ASU1-LC-B-LH1-ETW2-3	5.508	0.5080	0.0867	0.0054	NT		135.473	133.472	17.80	17.539	0.289
AITR1392-ASU1-LC-B-LH1-ETW2-4	5.509	0.5080	0.0851	0.0053	NT		127.007	122.822	17.76	17.173	0.309
AITR1392-ASU1-LC-B-LH1-ETW2-5	5.507	0.5078	0.0867	0.0054	NT		136.934	134.859	NT	NT	NT
AITR1392-ASU1-LC-B-LH2-ETW2-1	5.508	0.5068	0.0858	0.0054	NT		116.785	113.821	17.26	16.825	0.336
AITR1392-ASU1-LC-B-LH2-ETW2-2	5.509	0.5071	0.0863	0.0054	NT		142.580	139.771	20.23	19.831	0.365
AITR1392-ASU1-LC-B-LH2-ETW2-3	5.508	0.5072	0.0842	0.0053	NT		128.676	123.168	17.81	17.052	0.338
AITR1392-ASU1-LC-B-LH2-ETW2-4	5.508	0.5071	0.0865	0.0054	NT		129.762	127.550	17.91	17.600	0.308
AITR1392-ASU1-LC-B-LH2-ETW2-5	5.508	0.5066	0.0843	0.0053	NT		136.880	131.125	NT	NT	NT
Minimum	5.5072	0.5066	0.0842	0.0053			116.785	113.821	17.263	16.825	0.2890
Maximum	5.5085	0.5080	0.0867	0.0054			142.580	139.771	20.229	19.831	0.3680
Average	5.5080	0.5074	0.0856	0.0054			131.762	128.324	18.211	17.721	0.3321
Standard Deviation	0.0005	0.0005	0.0009	0.0001			7.966	8.245	0.909	0.940	0.0281
Coefficient of Variation (%)	0.01	0.10	1.08	1.08			6.05	6.43	4.99	5.30	8.47
No. Specimens	10	10	10	10			8	8	8	8	8

Notes:
NT=Not Tested
NR=No Result
GE=Gage Error
FM=Failure Mode Unacceptable
(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	TT	LH	CTD						

Test Group: AITR1392-ASU1-TT-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse Tensile Condition: CTD

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-ASU1-TT-B-LH1-CTD-1	10.055	1.0065	0.0847	0.0053	691.00	LGM	8.109	7.802	1.34	1.284	NT
AITR1392-ASU1-TT-B-LH1-CTD-2	10.053	1.0067	0.0844	0.0053	517.00	LWT	6.083	5.836	1.34	1.287	NT
AITR1392-ASU1-TT-B-LH1-CTD-3	10.023	1.0064	0.0839	0.0052	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TT-B-LH1-CTD-4	10.059	1.0070	0.0833	0.0052	586.00	LWT	6.983	6.613	1.54	1.457	NT
AITR1392-ASU1-TT-B-LH1-CTD-5	10.069	1.0079	0.0848	0.0053	FM	LIB	FM	FM	1.25	1.201	NT
AITR1392-ASU1-TT-B-LH2-CTD-1	10.044	1.0055	0.0848	0.0053	578.00	LWT	6.779	6.532	1.52	1.462	NT
AITR1392-ASU1-TT-B-LH2-CTD-2	10.048	1.0035	0.0846	0.0053	505.00	LGM	5.949	5.719	1.36	1.303	NT
AITR1392-ASU1-TT-B-LH2-CTD-3	10.027	1.0042	0.0849	0.0053	454.00	LAT	5.327	5.138	1.35	1.305	NT
AITR1392-ASU1-TT-B-LH2-CTD-4	10.026	1.0043	0.0846	0.0053	535.00	LGB	6.299	6.053	1.55	1.487	NT
AITR1392-ASU1-TT-B-LH2-CTD-5	10.054	1.0048	0.0850	0.0053	578.00	LGT	6.770	6.537	1.56	1.501	NT
Minimum	10.0225	1.0035	0.0833	0.0052	454.00		5.327	5.138	1.246	1.201	
Maximum	10.0688	1.0079	0.0850	0.0053	691.00		8.109	7.802	1.555	1.501	
Average	10.0457	1.0057	0.0845	0.0053	555.50		6.537	6.279	1.421	1.365	
Standard Deviation	0.0156	0.0014	0.0005	0.0000	70.77		0.833	0.795	0.117	0.111	
Coefficient of Variation (%)	0.16	0.14	0.61	0.61	12.74		12.74	12.66	8.27	8.12	
No. Specimens	10	10	10	10	8		8	8	9	9	

Notes:

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

LH1-3 BROKE BEFORE TEST BEGAN

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	TT	LH	RTD						

Test Group: AITR1392-ASU1-TT-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse Tensile Condition: RTD

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-ASU1-TT-B-LH1-RTD-1	10.048	1.0077	0.0853	0.0053	617.00	LGM	7.175	6.958	1.21	1.173	NT
AITR1392-ASU1-TT-B-LH1-RTD-2	10.043	1.0076	0.0842	0.0053	659.00	LGB	7.770	7.432	1.19	1.136	NT
AITR1392-ASU1-TT-B-LH1-RTD-3	10.048	1.0069	0.0853	0.0053	593.00	LGM	6.907	6.692	1.20	1.160	NT
AITR1392-ASU1-TT-B-LH1-RTD-4	10.032	1.0076	0.0839	0.0052	470.00	LGM	5.562	5.301	1.21	1.152	NT
AITR1392-ASU1-TT-B-LH1-RTD-5					NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TT-B-LH2-RTD-1	10.054	1.0042	0.0852	0.0053	605.00	LGT	7.069	6.846	1.20	1.162	NT
AITR1392-ASU1-TT-B-LH2-RTD-2	10.040	1.0042	0.0850	0.0053	551.00	LGM	6.453	6.235	1.19	1.153	NT
AITR1392-ASU1-TT-B-LH2-RTD-3	10.039	1.0048	0.0852	0.0053	507.00	LGT	5.922	5.734	1.18	1.139	NT
AITR1392-ASU1-TT-B-LH2-RTD-4	10.021	1.0049	0.0847	0.0053	610.00	LAT	7.169	6.898	1.20	1.156	NT
AITR1392-ASU1-TT-B-LH2-RTD-5					NT		NT	NT	NT	NT	NT
Minimum	10.0211	1.0042	0.0839	0.0052	470.00		5.562	5.301	1.176	1.136	
Maximum	10.0544	1.0077	0.0853	0.0053	659.00		7.770	7.432	1.210	1.173	
Average	10.0406	1.0060	0.0848	0.0053	576.50		6.753	6.512	1.197	1.154	
Standard Deviation	0.0105	0.0016	0.0006	0.0000	62.65		0.728	0.706	0.011	0.012	
Coefficient of Variation (%)	0.10	0.16	0.66	0.66	10.87		10.78	10.84	0.93	1.05	
No. Specimens	8	8	8	8	8		8	8	8	8	

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	ASU1	TT	LH	ETW						

Test Group: AITR1392-ASU1-TT-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse 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-ASU1-TT-B-LH1-ETW-1	10.080	1.0080	0.0859	0.0054	273.00	LIT	FM	FM	1.02	0.994	NT
AITR1392-ASU1-TT-B-LH1-ETW-2	10.066	1.0070	0.0851	0.0053	FM	LIB	FM	FM	1.03	0.998	NT
AITR1392-ASU1-TT-B-LH1-ETW-3	10.058	1.0083	0.0853	0.0053	319.00	LWT	3.709	3.595	1.03	0.996	NT
AITR1392-ASU1-TT-B-LH1-ETW-4	10.055	1.0076	0.0856	0.0054	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TT-B-LH1-ETW-5	10.073	1.0082	0.0855	0.0053	301.00	LWT	3.490	3.393	1.03	1.002	NT
AITR1392-ASU1-TT-B-LH2-ETW-1	10.054	1.0059	0.0854	0.0053	301.00	LWT	3.504	3.400	0.99	0.957	NT
AITR1392-ASU1-TT-B-LH2-ETW-2	10.057	1.0056	0.0865	0.0054	308.00	LWT	3.542	3.481	1.01	0.996	NT
AITR1392-ASU1-TT-B-LH2-ETW-3	10.021	1.0062	0.0848	0.0053	303.00	LWT	3.550	3.422	1.02	0.984	NT
AITR1392-ASU1-TT-B-LH2-ETW-4	10.061	1.0057	0.0865	0.0054	304.00	LAT	3.495	3.435	1.01	0.991	NT
AITR1392-ASU1-TT-B-LH2-ETW-5	10.069	1.0056	0.0855	0.0053	329.00	LWT	3.825	3.718	1.02	0.990	NT
Minimum	10.0206	1.0056	0.0848	0.0053	273.00		3.490	3.393	0.986	0.957	
Maximum	10.0803	1.0083	0.0865	0.0054	329.00		3.825	3.718	1.032	1.002	
Average	10.0593	1.0068	0.0856	0.0054	304.75		3.588	3.492	1.017	0.990	
Standard Deviation	0.0160	0.0011	0.0005	0.0000	16.22		0.129	0.121	0.014	0.013	
Coefficient of Variation (%)	0.16	0.11	0.63	0.63	5.32		3.59	3.47	1.40	1.35	
No. Specimens	10	10	10	10	8		7	7	9	9	

Notes:

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

LH1-4 BROKE BEFORE TEST BEGAN

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	TT	LH	ETW2						

Test Group: AITR1392-ASU1-TT-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse 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-ASU1-TT-B-LH1-ETW2-1	10.067	1.0088	0.0856	0.0054	253.00	LAT	2.929	2.850	0.98	0.958	NT
AITR1392-ASU1-TT-B-LH1-ETW2-2	10.069	1.0086	0.0865	0.0054	258.00	LGB	2.958	2.907	1.03	1.009	NT
AITR1392-ASU1-TT-B-LH1-ETW2-3	10.069	1.0047	0.0855	0.0053	229.00	LWT	2.666	2.590	1.02	0.995	NT
AITR1392-ASU1-TT-B-LH1-ETW2-4	10.074	0.9986	0.0859	0.0054	269.00	LGT	3.135	3.061	0.98	0.958	NT
AITR1392-ASU1-TT-B-LH1-ETW2-5	10.062	1.0040	0.0849	0.0053	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TT-B-LH2-ETW2-1	10.062	1.0057	0.0855	0.0053	259.00	LWT	3.011	2.927	0.95	0.922	NT
AITR1392-ASU1-TT-B-LH2-ETW2-2	10.065	1.0058	0.0851	0.0053	237.00	LWT	2.769	2.678	0.92	0.892	NT
AITR1392-ASU1-TT-B-LH2-ETW2-3	10.061	1.0060	0.0854	0.0053	273.00	LGT	3.178	3.084	0.94	0.914	NT
AITR1392-ASU1-TT-B-LH2-ETW2-4	10.077	1.0052	0.0852	0.0053	250.00	LWT	2.920	2.826	1.00	0.964	NT
AITR1392-ASU1-TT-B-LH2-ETW2-5					NT		NT	NT	NT	NT	NT
Minimum	10.0614	0.9986	0.0849	0.0053	229.00		2.666	2.590	0.922	0.892	
Maximum	10.0773	1.0088	0.0865	0.0054	273.00		3.178	3.084	1.027	1.009	
Average	10.0674	1.0053	0.0855	0.0053	253.50		2.946	2.865	0.978	0.951	
Standard Deviation	0.0055	0.0030	0.0005	0.0000	14.91		0.171	0.171	0.038	0.040	
Coefficient of Variation (%)	0.05	0.29	0.56	0.56	5.88		5.80	5.96	3.89	4.22	
No. Specimens	9	9	9	9	8		8	8	8	8	

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	ASU1	TC	LH	RTD						

Test Group: AITR1392-ASU1-TC-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse 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-ASU1-TC-B-LH1-RTD-1	5.509	0.4971	0.0861	0.0054	1131.00	HGM	26.417	25.856	1.35	1.322	0.016
AITR1392-ASU1-TC-B-LH1-RTD-2	5.508	0.4985	0.0875	0.0055	1132.00	HGM	25.950	25.803	1.22	1.210	0.013
AITR1392-ASU1-TC-B-LH1-RTD-3	5.509	0.4997	0.0870	0.0054	1046.00	HGB	24.050	23.785	1.21	1.193	0.015
AITR1392-ASU1-TC-B-LH1-RTD-4	5.509	0.4994	0.0871	0.0054	1202.00	HGB	27.648	27.349	1.21	1.197	0.014
AITR1392-ASU1-TC-B-LH1-RTD-5	5.507	0.4988	0.0860	0.0054	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TC-B-LH2-RTD-1	5.504	0.5072	0.0860	0.0054	1208.00	HGM	27.682	27.063	1.28	1.254	0.018
AITR1392-ASU1-TC-B-LH2-RTD-2	5.504	0.5085	0.0863	0.0054	1192.00	HGT	27.177	26.636	1.26	1.233	0.017
AITR1392-ASU1-TC-B-LH2-RTD-3	5.506	0.5066	0.0869	0.0054	1218.00	HGM	27.664	27.323	1.26	1.240	0.021
AITR1392-ASU1-TC-B-LH2-RTD-4	5.505	0.5067	0.0860	0.0054	1237.00	HGM	28.398	27.742	1.25	1.220	0.013
AITR1392-ASU1-TC-B-LH2-RTD-5	5.505	0.5058	0.0862	0.0054	NT		NT	NT	NT	NT	NT
Minimum	5.5041	0.4971	0.0860	0.0054	1046.00		24.050	23.785	1.206	1.193	0.0130
Maximum	5.5094	0.5085	0.0875	0.0055	1237.00		28.398	27.742	1.351	1.322	0.0210
Average	5.5067	0.5028	0.0865	0.0054	1170.75		26.873	26.445	1.254	1.234	0.0159
Standard Deviation	0.0020	0.0045	0.0006	0.0000	63.34		1.380	1.283	0.048	0.042	0.0027
Coefficient of Variation (%)	0.04	0.89	0.64	0.64	5.41		5.13	4.85	3.80	3.37	17.31
No. Specimens	10	10	10	10	8		8	8	8	8	8

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	ASU1	TC	LH	ETW						

Test Group: AITR1392-ASU1-TC-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse Compression Condition: ETW

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-ASU1-TC-B-LH1-ETW-1	5.516	0.4970	0.0877	0.0055	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TC-B-LH1-ETW-2	5.518	0.4966	0.0887	0.0055	637.00	HGM	14.466	14.575	1.13	1.139	0.013
AITR1392-ASU1-TC-B-LH1-ETW-3	5.518	0.4969	0.0883	0.0055	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TC-B-LH1-ETW-4	5.518	0.4974	0.0882	0.0055	673.00	HGM	15.347	15.376	1.06	1.057	0.012
AITR1392-ASU1-TC-B-LH1-ETW-5	5.518	0.4970	0.0883	0.0055	658.00	HGM	15.000	15.046	1.16	1.164	0.012
AITR1392-ASU1-TC-B-LH2-ETW-1	5.515	0.5076	0.0872	0.0054	662.00	HGM	14.963	14.821	1.08	1.073	0.016
AITR1392-ASU1-TC-B-LH2-ETW-2	5.515	0.5073	0.0870	0.0054	667.00	HGM	15.107	14.941	1.14	1.129	0.015
AITR1392-ASU1-TC-B-LH2-ETW-3	5.515	0.5069	0.0878	0.0055	647.00	HGM	14.543	14.504	1.07	1.064	0.013
AITR1392-ASU1-TC-B-LH2-ETW-4	5.515	0.5072	0.0861	0.0054	661.00	HGM	15.129	14.808	1.13	1.103	GE
AITR1392-ASU1-TC-B-LH2-ETW-5	5.515	0.5060	0.0880	0.0055	656.00	HGM	14.731	14.731	1.12	1.122	0.014
Minimum	5.5147	0.4966	0.0861	0.0054	637.00		14.466	14.504	1.055	1.057	0.0120
Maximum	5.5182	0.5076	0.0887	0.0055	673.00		15.347	15.376	1.160	1.164	0.0160
Average	5.5163	0.5020	0.0877	0.0055	657.63		14.911	14.851	1.111	1.106	0.0136
Standard Deviation	0.0015	0.0053	0.0008	0.0000	11.31		0.305	0.277	0.038	0.039	0.0015
Coefficient of Variation (%)	0.03	1.06	0.86	0.86	1.72		2.05	1.86	3.40	3.49	11.14
No. Specimens	10	10	10	10	8		8	8	8	8	7

Notes:

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

MH1-1&3 BROKE BEFORE TEST BEGAN DUE TO STRAIN GAGE TAB PROBLEMS

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	TC	LH	ETW2						

Test Group: AITR1392-ASU1-TC-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Transverse Compression Condition: ETW2

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-ASU1-TC-B-LH1-ETW2-1	5.517	0.4959	0.0863	0.0054	474.00	HGM	11.071	10.861	1.18	1.155	0.015
AITR1392-ASU1-TC-B-LH1-ETW2-2	5.518	0.4965	0.0878	0.0055	519.00	HGM	11.901	11.879	1.33	1.327	0.019
AITR1392-ASU1-TC-B-LH1-ETW2-3	5.519	0.4962	0.0877	0.0055	533.00	HGM	12.252	12.206	1.36	1.358	0.016
AITR1392-ASU1-TC-B-LH1-ETW2-4	5.518	0.4969	0.0883	0.0055	519.00	HGM	11.833	11.869	1.01	1.009	0.012
AITR1392-ASU1-TC-B-LH1-ETW2-5	5.518	0.4961	0.0888	0.0055	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-TC-B-LH2-ETW2-1	5.513	0.5066	0.0877	0.0055	552.00	HGM	12.424	12.382	1.17	1.166	0.012
AITR1392-ASU1-TC-B-LH2-ETW2-2	5.516	0.5063	0.0878	0.0055	556.00	HGM	12.503	12.479	1.12	1.117	0.013
AITR1392-ASU1-TC-B-LH2-ETW2-3	5.515	0.5060	0.0864	0.0054	551.00	HGM	12.604	12.375	1.31	1.281	0.016
AITR1392-ASU1-TC-B-LH2-ETW2-4	5.515	0.5064	0.0874	0.0055	559.00	HGM	12.629	12.543	1.25	1.244	0.017
AITR1392-ASU1-TC-B-LH2-ETW2-5	5.515	0.5067	0.0882	0.0055	NT		NT	NT	NT	NT	NT
Minimum	5.5132	0.4959	0.0863	0.0054	474.00		11.071	10.861	1.006	1.009	0.0120
Maximum	5.5185	0.5067	0.0888	0.0055	559.00		12.629	12.543	1.363	1.358	0.0190
Average	5.5165	0.5014	0.0876	0.0055	532.88		12.152	12.074	1.215	1.207	0.0150
Standard Deviation	0.0018	0.0053	0.0008	0.0000	28.69		0.531	0.553	0.120	0.117	0.0025
Coefficient of Variation (%)	0.03	1.06	0.88	0.88	5.38		4.37	4.58	9.89	9.70	16.71
No. Specimens	10	10	10	10	8		8	8	8	8	8

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	ASU1	UNT0	LH	CTD						

Test Group: AITR1392-ASU1-UNT0-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 0/90 Unnotched Tensile Condition: CTD

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-ASU1-UNT0-B-LH1-CTD-1	10.026	1.0069	0.0873	0.0055	13436.00	LAB	152.798	151.641	10.83	10.752	NT
AITR1392-ASU1-UNT0-B-LH1-CTD-2	10.030	1.0066	0.0874	0.0055	13601.00	LAB/SGM	154.592	153.538	10.23	10.157	NT
AITR1392-ASU1-UNT0-B-LH1-CTD-3	10.038	1.0068	0.0899	0.0056	14031.00	LAB/DWT	155.072	158.361	9.78	9.985	NT
AITR1392-ASU1-UNT0-B-LH1-CTD-4	10.037	1.0068	0.0883	0.0055	12734.00	LAB/SGM	143.239	143.727	GE	GE	NT
AITR1392-ASU1-UNT0-B-LH1-CTD-5	10.029	1.0068	0.0882	0.0055	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-UNT0-B-LH2-CTD-1	10.029	1.0064	0.0885	0.0055	13635.00	LAB/SGM	153.146	153.958	10.88	10.941	NT
AITR1392-ASU1-UNT0-B-LH2-CTD-2	10.036	1.0074	0.0883	0.0055	12524.00	LAB/DAT	140.788	141.268	11.01	11.045	NT
AITR1392-ASU1-UNT0-B-LH2-CTD-3	10.035	1.0065	0.0891	0.0056	13427.00	LAT	149.718	151.589	10.82	10.952	NT
AITR1392-ASU1-UNT0-B-LH2-CTD-4	10.035	1.0068	0.0903	0.0056	13622.00	LAT	149.839	153.755	10.29	10.558	NT
AITR1392-ASU1-UNT0-B-LH2-CTD-5	10.034	1.0065	0.0912	0.0057	NT		NT	NT	NT	NT	NT
Minimum	10.0258	1.0064	0.0873	0.0055	12524.00		140.788	141.268	9.778	9.985	
Maximum	10.0382	1.0074	0.0912	0.0057	14031.00		155.072	158.361	11.007	11.045	
Average	10.0329	1.0068	0.0888	0.0056	13376.25		149.899	150.980	10.548	10.627	
Standard Deviation	0.0040	0.0003	0.0013	0.0001	500.22		5.280	5.674	0.455	0.415	
Coefficient of Variation (%)	0.04	0.03	1.42	1.42	3.74		3.52	3.76	4.31	3.90	
No. Specimens	10	10	10	10	8		8	8	7	7	

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	ASU1	UNT0	LH	RTD						

Test Group: AITR1392-ASU1-UNT0-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 0/90 Unnotched Tensile Condition: RTD

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-ASU1-UNT0-B-LH1-RTD-1	10.031	1.0080	0.0886	0.0055	12471.00	LAT	139.696	140.596	9.86	9.920	NT
AITR1392-ASU1-UNT0-B-LH1-RTD-2	10.033	1.0075	0.0891	0.0056	11795.00	LAT	131.394	133.036	9.42	9.538	NT
AITR1392-ASU1-UNT0-B-LH1-RTD-3	10.031	1.0077	0.0883	0.0055	12424.00	LAT	139.632	140.108	9.97	10.007	NT
AITR1392-ASU1-UNT0-B-LH1-RTD-4	10.032	1.0080	0.0886	0.0055	12390.00	LAT	138.789	139.683	9.92	9.988	NT
AITR1392-ASU1-UNT0-B-LH1-RTD-5	10.020	1.0089	0.0881	0.0055	11796.00	LAT	132.762	132.863	9.81	9.812	NT
AITR1392-ASU1-UNT0-B-LH2-RTD-1	10.032	1.0060	0.0899	0.0056	11471.00	LAT	126.841	129.579	9.46	9.662	NT
AITR1392-ASU1-UNT0-B-LH2-RTD-2	10.033	1.0064	0.0904	0.0057	12630.00	LAT	138.819	142.605	9.82	10.086	NT
AITR1392-ASU1-UNT0-B-LH2-RTD-3	10.030	1.0064	0.0903	0.0056	12191.00	LAT	134.102	137.658	9.57	9.824	NT
AITR1392-ASU1-UNT0-B-LH2-RTD-4	10.036	1.0062	0.0896	0.0056	FM	LIT	FM	FM	9.57	9.739	NT
AITR1392-ASU1-UNT0-B-LH2-RTD-5	10.031	1.0062	0.0886	0.0055	11732.00	LAT	131.645	132.492	9.87	9.936	NT
Minimum	10.0199	1.0060	0.0881	0.0055	11471.00		126.841	129.579	9.420	9.538	
Maximum	10.0359	1.0089	0.0904	0.0057	12630.00		139.696	142.605	9.973	10.086	
Average	10.0309	1.0071	0.0891	0.0056	12100.00		134.853	136.513	9.727	9.851	
Standard Deviation	0.0042	0.0010	0.0009	0.0001	408.11		4.595	4.579	0.202	0.170	
Coefficient of Variation (%)	0.04	0.10	0.96	0.96	3.37		3.41	3.35	2.08	1.72	
No. Specimens	10	10	10	10	9		9	9	10	10	

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	ASU1	UNT0	LH	ETW2						

Test Group: AITR1392-ASU1-UNT0-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 0/90 Unnotched 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-ASU1-UNT0-B-LH1-ETW2-1	10.049	1.0097	0.0889	0.0056	11633.00	LAT/LAB	129.545	130.919	10.46	10.568	NT
AITR1392-ASU1-UNT0-B-LH1-ETW2-2	10.042	1.0086	0.0901	0.0056	10611.00	DAT	116.761	119.547	11.16	11.430	NT
AITR1392-ASU1-UNT0-B-LH1-ETW2-3	10.038	1.0094	0.0893	0.0056	11003.00	LAT	122.017	123.866	11.59	11.769	NT
AITR1392-ASU1-UNT0-B-LH1-ETW2-4	10.034	1.0100	0.0901	0.0056	10487.00	LAT	115.244	117.994	10.81	11.072	NT
AITR1392-ASU1-UNT0-B-LH1-ETW2-5	10.041	1.0079	0.0902	0.0056	10976.00	LAT	120.735	123.754	10.87	11.137	NT
AITR1392-ASU1-UNT0-B-LH2-ETW2-1	10.045	1.0066	0.0902	0.0056	11670.00	LAT	128.574	131.740	GE	GE	NT
AITR1392-ASU1-UNT0-B-LH2-ETW2-2	10.048	1.0069	0.0908	0.0057	11617.00	LAT	127.115	131.111	GE	GE	NT
AITR1392-ASU1-UNT0-B-LH2-ETW2-3	10.048	1.0068	0.0900	0.0056	10697.00	LAT	118.009	120.736	GE	GE	NT
AITR1392-ASU1-UNT0-B-LH2-ETW2-4	10.044	1.0064	0.0912	0.0057	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-UNT0-B-LH2-ETW2-5	10.046	1.0059	0.0890	0.0056	10608.00	LAT	118.532	119.834	10.40	10.517	NT
Minimum	10.0339	1.0059	0.0889	0.0056	10487.00		115.244	117.994	10.403	10.517	
Maximum	10.0489	1.0100	0.0912	0.0057	11670.00		129.545	131.740	11.593	11.769	
Average	10.0435	1.0078	0.0900	0.0056	11033.56		121.837	124.389	10.883	11.082	
Standard Deviation	0.0048	0.0015	0.0007	0.0000	484.86		5.347	5.488	0.447	0.486	
Coefficient of Variation (%)	0.05	0.15	0.80	0.80	4.39		4.39	4.41	4.11	4.38	
No. Specimens	10	10	10	10	9		9	9	6	6	

Notes:

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

B-LH2-4 SLIPPED IN GRIP/ NO FAILURE

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	UNC0	LH	RTD						

Test Group: AITR1392-ASU1-UNC0-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 90/0 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-ASU1-UNC0-B-LH1-RTD-1	5.507	0.5047	0.0850	0.0053	5040.00	BGM	117.538	113.486	10.28	9.924	0.031
AITR1392-ASU1-UNC0-B-LH1-RTD-2	5.508	0.5064	0.0857	0.0054	4619.00	BGB	106.425	103.644	10.19	9.919	0.036
AITR1392-ASU1-UNC0-B-LH1-RTD-3	5.508	0.5065	0.0841	0.0053	4231.00	BGT	99.366	94.925	10.39	9.924	0.034
AITR1392-ASU1-UNC0-B-LH1-RTD-4	5.508	0.5066	0.0859	0.0054	4974.00	HIT/BGM	114.308	111.580	9.87	9.638	0.033
AITR1392-ASU1-UNC0-B-LH1-RTD-5	5.507	0.5063	0.0874	0.0055	4940.00	BGT	111.594	110.876	10.10	10.030	0.029
AITR1392-ASU1-UNC0-B-LH2-RTD-1	5.509	0.5079	0.0838	0.0052	4619.00	BGB	108.474	103.338	9.76	9.301	0.033
AITR1392-ASU1-UNC0-B-LH2-RTD-2	5.508	0.5077	0.0850	0.0053	4677.00	BGT	108.399	104.683	10.00	9.653	0.045
AITR1392-ASU1-UNC0-B-LH2-RTD-3	5.509	0.5081	0.0840	0.0052	4620.00	BGT	108.268	103.326	9.97	9.519	0.032
AITR1392-ASU1-UNC0-B-LH2-RTD-4	5.509	0.5082	0.0856	0.0054	4808.00	BGT	110.481	107.510	10.01	9.740	0.032
AITR1392-ASU1-UNC0-B-LH2-RTD-5	5.510	0.5075	0.0848	0.0053	NT		NT	NT	NT	NT	NT
Minimum	5.5068	0.5047	0.0838	0.0052	4231.00		99.366	94.925	9.763	9.301	0.0290
Maximum	5.5095	0.5082	0.0874	0.0055	5040.00		117.538	113.486	10.388	10.030	0.0450
Average	5.5083	0.5070	0.0851	0.0053	4725.33		109.428	105.930	10.062	9.739	0.0339
Standard Deviation	0.0009	0.0011	0.0011	0.0001	248.54		5.111	5.672	0.196	0.235	0.0046
Coefficient of Variation (%)	0.02	0.22	1.28	1.28	5.26		4.67	5.35	1.95	2.42	13.56
No. Specimens	10	10	10	10	9		9	9	9	9	9

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	ASU1	UNC0	LH	ETW						

Test Group: AITR1392-ASU1-UNC0-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 90/0 Compression Condition: ETW

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-ASU1-UNC0-B-LH1-ETW-1	5.506	0.5056	0.0865	0.0054	2888.00	HAT	66.035	64.909	10.84	10.653	0.032
AITR1392-ASU1-UNC0-B-LH1-ETW-2	5.508	0.5056	0.0871	0.0054	3282.00	HAT	74.555	73.765	9.95	9.847	0.038
AITR1392-ASU1-UNC0-B-LH1-ETW-3	5.509	0.5057	0.0843	0.0053	3738.00	HGT/BGB	87.689	84.003	10.11	9.680	0.031
AITR1392-ASU1-UNC0-B-LH1-ETW-4	5.508	0.5051	0.0864	0.0054	3146.00	BGB	72.112	70.773	GE	GE	0.043
AITR1392-ASU1-UNC0-B-LH1-ETW-5	5.509	0.5055	0.0843	0.0053	3153.00	BGB	73.961	70.879	9.98	9.564	0.033
AITR1392-ASU1-UNC0-B-LH2-ETW-1	5.511	0.5073	0.0849	0.0053	3043.00	BGT	70.681	68.164	10.46	10.084	0.034
AITR1392-ASU1-UNC0-B-LH2-ETW-2	5.510	0.5066	0.0876	0.0055	3305.00	HIT/HAT	74.507	74.140	10.26	10.205	0.039
AITR1392-ASU1-UNC0-B-LH2-ETW-3	5.510	0.5063	0.0878	0.0055	3553.00	HIB/HAB	79.922	79.740	9.99	9.964	0.039
AITR1392-ASU1-UNC0-B-LH2-ETW-4	5.510	0.5059	0.0900	0.0056	3882.00	BAT	85.292	87.198	10.61	10.847	0.032
AITR1392-ASU1-UNC0-B-LH2-ETW-5	5.510	0.5062	0.0875	0.0055	3745.00	BAT	84.552	84.071	10.06	10.007	0.028
Minimum	5.5062	0.5051	0.0843	0.0053	2888.00		66.035	64.909	9.953	9.564	0.0280
Maximum	5.5111	0.5073	0.0900	0.0056	3882.00		87.689	87.198	10.838	10.847	0.0430
Average	5.5091	0.5060	0.0866	0.0054	3373.50		76.931	75.764	10.250	10.095	0.0349
Standard Deviation	0.0014	0.0006	0.0018	0.0001	336.66		7.103	7.560	0.317	0.423	0.0046
Coefficient of Variation (%)	0.03	0.13	2.04	2.04	9.98		9.23	9.98	3.09	4.19	13.27
No. Specimens	10	10	10	10	10		10	10	9	9	10

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	ASU1	UNC0	LH	ETW2						

Test Group: AITR1392-ASU1-UNC0-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 90/0 Compression Condition: ETW2

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-ASU1-UNC0-B-LH1-ETW2-1	5.508	0.5048	0.0860	0.0054	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-UNC0-B-LH1-ETW2-2	5.508	0.5058	0.0867	0.0054	NT		NT	NT	NT	NT	NT
AITR1392-ASU1-UNC0-B-LH1-ETW2-3	5.509	0.5047	0.0860	0.0054	3499.00	HIB/HAB	80.651	78.787	11.06	10.803	0.024
AITR1392-ASU1-UNC0-B-LH1-ETW2-4	5.509	0.5057	0.0866	0.0054	3310.00	HIT/HAT	75.611	74.379	11.25	11.069	0.037
AITR1392-ASU1-UNC0-B-LH1-ETW2-5	5.509	0.5040	0.0847	0.0053	3480.00	BAB	81.520	78.463	GE	GE	0.030
AITR1392-ASU1-UNC0-B-LH2-ETW2-1	5.510	0.5070	0.0874	0.0055	3081.00	HIT/HAT	69.525	69.051	10.60	10.526	0.030
AITR1392-ASU1-UNC0-B-LH2-ETW2-2	5.504	0.5067	0.0860	0.0054	3700.00	HIB/HAB	84.881	82.984	10.48	10.241	0.035
AITR1392-ASU1-UNC0-B-LH2-ETW2-3	5.510	0.5071	0.0862	0.0054	3347.00	HIB/HAB	76.604	75.008	GE	GE	GE
AITR1392-ASU1-UNC0-B-LH2-ETW2-4	5.510	0.5062	0.0870	0.0054	3401.00	HIT/HAT	77.251	76.344	GE	GE	0.048
AITR1392-ASU1-UNC0-B-LH2-ETW2-5	5.510	0.5063	0.0846	0.0053	3492.00	HIT/HAT	81.488	78.371	10.82	10.408	0.034
Minimum	5.5035	0.5040	0.0846	0.0053	3081.00		69.525	69.051	10.475	10.241	0.0240
Maximum	5.5103	0.5071	0.0874	0.0055	3700.00		84.881	82.984	11.252	11.069	0.0480
Average	5.5087	0.5058	0.0861	0.0054	3413.75		78.442	76.674	10.841	10.609	0.0340
Standard Deviation	0.0020	0.0010	0.0009	0.0001	179.61		4.742	4.082	0.320	0.329	0.0075
Coefficient of Variation (%)	0.04	0.21	1.04	1.04	5.26		6.05	5.32	2.95	3.10	22.08
No. Specimens	10	10	10	10	8		8	8	5	5	7

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	ASU1	IPS	LH	CTD				

Test Group: AITR1392-ASU1-IPS-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

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
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	Maximum	Measured
AITR1392-ASU1-IPS-B-LH1-CTD-1	10.034	1.0093	0.0428	0.0053		8.423	11.910	NT	0.630
AITR1392-ASU1-IPS-B-LH1-CTD-2	10.033	1.0088	0.0418	0.0052		8.654	12.590	NT	0.642
AITR1392-ASU1-IPS-B-LH1-CTD-3	10.041	0.9967	0.0415	0.0052		9.327	12.290	NT	0.690
AITR1392-ASU1-IPS-B-LH1-CTD-4	10.048	1.0090	0.0421	0.0053		9.007	12.590	NT	0.681
AITR1392-ASU1-IPS-B-LH1-CTD-5	10.036	1.0085	0.0426	0.0053		NT	NT	NT	NT
AITR1392-ASU1-IPS-B-LH2-CTD-1	10.074	1.0074	0.0446	0.0056		8.864	13.100	NT	0.668
AITR1392-ASU1-IPS-B-LH2-CTD-2	10.068	1.0066	0.0447	0.0056		8.984	12.910	NT	0.664
AITR1392-ASU1-IPS-B-LH2-CTD-3	10.072	1.0074	0.0439	0.0055		8.409	12.250	NT	0.624
AITR1392-ASU1-IPS-B-LH2-CTD-4	10.071	1.0068	0.0447	0.0056		8.910	12.720	NT	0.662
AITR1392-ASU1-IPS-B-LH2-CTD-5	10.077	1.0057	0.0444	0.0055		NT	NT	NT	NT
Minimum	10.0326	0.9967	0.0415	0.0052		8.409	11.910		0.624
Maximum	10.0774	1.0093	0.0447	0.0056		9.327	13.100		0.690
Average	10.0553	1.0066	0.0433	0.0054		8.822	12.545		0.658
Standard Deviation	0.0188	0.0037	0.0013	0.0002		0.312	0.384		0.024
Coefficient of Variation (%)	0.19	0.36	2.94	2.94		3.54	3.06		3.59
No. Specimens	10	10	10	10		8	8		8

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	ASU1	IPS	LH	RTD				

Test Group: AITR1392-ASU1-IPS-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

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.
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	Maximum	Measured
AITR1392-ASU1-IPS-B-LH1-RTD-1	10.037	1.0084	0.0425	0.0053		6.720	9.170	NT	0.542
AITR1392-ASU1-IPS-B-LH1-RTD-2	10.036	1.0083	0.0426	0.0053		6.728	9.330	NT	0.531
AITR1392-ASU1-IPS-B-LH1-RTD-3	10.033	1.0082	0.0425	0.0053		6.920	9.350	NT	0.540
AITR1392-ASU1-IPS-B-LH1-RTD-4	10.028	1.0068	0.0419	0.0052		6.742	9.320	NT	0.493
AITR1392-ASU1-IPS-B-LH1-RTD-5						NT	NT	NT	NT
AITR1392-ASU1-IPS-B-LH2-RTD-1	10.072	1.0074	0.0447	0.0056		6.920	9.840	NT	0.547
AITR1392-ASU1-IPS-B-LH2-RTD-2	10.074	1.0075	0.0448	0.0056		6.770	9.780	NT	0.536
AITR1392-ASU1-IPS-B-LH2-RTD-3	10.068	1.0067	0.0444	0.0056		6.888	9.700	NT	0.555
AITR1392-ASU1-IPS-B-LH2-RTD-4	10.082	1.0073	0.0445	0.0056		6.811	9.800	NT	0.537
AITR1392-ASU1-IPS-B-LH2-RTD-5	10.068	1.0081	0.0443	0.0055		NT	NT	NT	NT
Minimum	10.0283	1.0067	0.0419	0.0052		6.720	9.170		0.493
Maximum	10.0824	1.0084	0.0448	0.0056		6.920	9.840		0.555
Average	10.0554	1.0076	0.0436	0.0054		6.812	9.536		0.535
Standard Deviation	0.0212	0.0006	0.0012	0.0001		0.086	0.269		0.019
Coefficient of Variation (%)	0.21	0.06	2.64	2.64		1.26	2.82		3.46
No. Specimens	9	9	9	9		8	8		8

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	ASU1	IPS	LH	ETW				

Test Group: AITR1392-ASU1-IPS-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: ±45° In Plane Shear Condition: ETW #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	Maximum	Measured
AITR1392-ASU1-IPS-B-LH1-ETW-1	10.038	1.0092	0.0430	0.0054		3.807	5.380	NT	0.360
AITR1392-ASU1-IPS-B-LH1-ETW-2	10.056	1.0097	0.0434	0.0054		3.830	5.240	NT	0.340
AITR1392-ASU1-IPS-B-LH1-ETW-3	10.054	1.0078	0.0427	0.0053		3.944	5.560	NT	0.395
AITR1392-ASU1-IPS-B-LH1-ETW-4	10.059	1.0095	0.0421	0.0053		4.063	5.400	NT	0.386
AITR1392-ASU1-IPS-B-LH1-ETW-5	10.061	1.0093	0.0428	0.0054		NT	NT	NT	NT
AITR1392-ASU1-IPS-B-LH2-ETW-1	10.086	1.0080	0.0453	0.0057		4.094	5.890	NT	0.393
AITR1392-ASU1-IPS-B-LH2-ETW-2	10.083	1.0084	0.0455	0.0057		3.919	5.420	NT	0.389
AITR1392-ASU1-IPS-B-LH2-ETW-3	10.085	1.0085	0.0455	0.0057		3.896	5.250	NT	0.372
AITR1392-ASU1-IPS-B-LH2-ETW-4	10.082	1.0083	0.0456	0.0057		3.974	5.700	NT	0.358
AITR1392-ASU1-IPS-B-LH2-ETW-5	10.083	1.0100	0.0451	0.0056		NT	NT	NT	NT
Minimum	10.0383	1.0078	0.0421	0.0053		3.807	5.240		0.340
Maximum	10.0855	1.0100	0.0456	0.0057		4.094	5.890		0.395
Average	10.0687	1.0089	0.0441	0.0055		3.941	5.480		0.374
Standard Deviation	0.0170	0.0008	0.0014	0.0002		0.102	0.225		0.020
Coefficient of Variation (%)	0.17	0.08	3.19	3.19		2.58	4.10		5.33
No. Specimens	10	10	10	10		8	8		8

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	ASU1	IPS	LH	ETW2				

Test Group: AITR1392-ASU1-IPS-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

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	Maximum	Measured
AITR1392-ASU1-IPS-B-LH1-ETW2-1	10.052	1.0096	0.0429	0.0054		3.221	GE	NT	0.358
AITR1392-ASU1-IPS-B-LH1-ETW2-2	10.065	1.0096	0.0425	0.0053		3.236	4.420	NT	0.347
AITR1392-ASU1-IPS-B-LH1-ETW2-3	10.060	1.0092	0.0443	0.0055		3.157	4.190	NT	0.345
AITR1392-ASU1-IPS-B-LH1-ETW2-4	10.046	1.0092	0.0425	0.0053		3.302	4.490	NT	0.333
AITR1392-ASU1-IPS-B-LH1-ETW2-5	10.047	1.0100	0.0432	0.0054		3.464	5.270	NT	0.270
AITR1392-ASU1-IPS-B-LH2-ETW2-1	10.081	1.0080	0.0497	0.0062		3.404	4.770	NT	0.335
AITR1392-ASU1-IPS-B-LH2-ETW2-2	10.090	1.0085	0.0449	0.0056		3.229	4.630	NT	0.346
AITR1392-ASU1-IPS-B-LH2-ETW2-3	10.083	1.0085	0.0456	0.0057		3.479	4.790	NT	0.329
AITR1392-ASU1-IPS-B-LH2-ETW2-4	10.085	1.0087	0.0458	0.0057		3.321	4.730	NT	0.355
AITR1392-ASU1-IPS-B-LH2-ETW2-5	10.088	1.0074	0.0454	0.0057		NT	NT	NT	NT
Minimum	10.0464	1.0074	0.0425	0.0053		3.157	4.190		0.270
Maximum	10.0900	1.0100	0.0497	0.0062		3.479	5.270		0.358
Average	10.0696	1.0089	0.0447	0.0056		3.313	4.661		0.335
Standard Deviation	0.0176	0.0008	0.0022	0.0003		0.114	0.319		0.026
Coefficient of Variation (%)	0.17	0.08	4.87	4.87		3.45	6.85		7.86
No. Specimens	10	10	10	10		9	8		9

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	ASU1	SBS	LH	CTD			

Test Group: AITR1392-ASU1-SBS-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055

Test Type: Short Beam Shear Condition: CTD #Plies: 16

Test Method: MP1116 (ASTMD2344) Span (4t): 0.34

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	
							Measured	Normalized
AITR1392-ASU1-SBS-B-LH1-CTD-1	0.514	0.2550	0.0834	0.0052	440.00	ILS	15.517	14.706
AITR1392-ASU1-SBS-B-LH1-CTD-2	0.515	0.2555	0.0858	0.0054	478.00	ILS	16.354	15.945
AITR1392-ASU1-SBS-B-LH1-CTD-3	0.515	0.2555	0.0874	0.0055	512.00	ILS	17.196	17.079
AITR1392-ASU1-SBS-B-LH1-CTD-4	0.513	0.2555	0.0880	0.0055	507.00	ILS	16.906	16.912
AITR1392-ASU1-SBS-B-LH1-CTD-5	0.513	0.2555	0.0837	0.0052	NT		NT	NT
AITR1392-ASU1-SBS-B-LH2-CTD-1	0.516	0.2490	0.0860	0.0054	515.00	ILS	18.030	17.627
AITR1392-ASU1-SBS-B-LH2-CTD-2	0.517	0.2515	0.0858	0.0054	477.00	ILS	16.585	16.164
AITR1392-ASU1-SBS-B-LH2-CTD-3	0.516	0.2545	0.0850	0.0053	491.00	ILS	17.030	16.443
AITR1392-ASU1-SBS-B-LH2-CTD-4	0.516	0.2520	0.0869	0.0054	523.00	ILS	17.905	17.688
AITR1392-ASU1-SBS-B-LH2-CTD-5	0.514	0.2555	0.0861	0.0054	NT		NT	NT
Minimum	0.5125	0.2490	0.0834	0.0052	440.00		15.517	14.706
Maximum	0.5165	0.2555	0.0880	0.0055	523.00		18.030	17.688
Average	0.5146	0.2540	0.0858	0.0054	492.88		16.940	16.570
Standard Deviation	0.0013	0.0023	0.0015	0.0001	27.35		0.818	0.985
Coefficient of Variation (%)	0.25	0.91	1.73	1.73	5.55		4.83	5.94
No. Specimens	10	10	10	10	8		8	8

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	ASU1	SBS	LH	RTD			

Test Group: AITR1392-ASU1-SBS-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055

Test Type: Short Beam Shear Condition: RTD #Plies: 16

Test Method: MP1116 (ASTMD2344) Span (4t): 0.34

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	
							Measured	Normalized
AITR1392-ASU1-SBS-B-LH1-RTD-1	0.513	0.2570	0.0868	0.0054	369.00	ILS	12.406	12.237
AITR1392-ASU1-SBS-B-LH1-RTD-2	0.513	0.2560	0.0878	0.0055	391.00	ILS	13.047	13.017
AITR1392-ASU1-SBS-B-LH1-RTD-3	0.513	0.2560	0.0853	0.0053	373.00	ILS	12.811	12.418
AITR1392-ASU1-SBS-B-LH1-RTD-4	0.514	0.2555	0.0882	0.0055	378.00	ILS	12.585	12.609
AITR1392-ASU1-SBS-B-LH1-RTD-5	0.517	0.2555	0.0848	0.0053	NT		NT	NT
AITR1392-ASU1-SBS-B-LH2-RTD-1	0.516	0.2545	0.0856	0.0053	371.00	ILS	12.777	12.424
AITR1392-ASU1-SBS-B-LH2-RTD-2	0.516	0.2555	0.0858	0.0054	360.00	ILS	12.321	12.009
AITR1392-ASU1-SBS-B-LH2-RTD-3	0.513	0.2555	0.0847	0.0053	370.00	ILS	12.823	12.342
AITR1392-ASU1-SBS-B-LH2-RTD-4	0.516	0.2455	0.0853	0.0053	383.00	ILS	13.717	13.296
AITR1392-ASU1-SBS-B-LH2-RTD-5	0.514	0.2565	0.0847	0.0053	NT		NT	NT
Minimum	0.5125	0.2455	0.0847	0.0053	360.00		12.321	12.009
Maximum	0.5170	0.2570	0.0882	0.0055	391.00		13.717	13.296
Average	0.5143	0.2548	0.0859	0.0054	374.38		12.811	12.544
Standard Deviation	0.0017	0.0033	0.0013	0.0001	9.50		0.436	0.422
Coefficient of Variation (%)	0.32	1.30	1.48	1.48	2.54		3.41	3.36
No. Specimens	10	10	10	10	8		8	8

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	ASU1	SBS	LH	ETD			

Test Group: AITR1392-ASU1-SBS-LH-ETD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055

Test Type: Short Beam Shear Condition: ETD #Plies: 16

Test Method: MP1116 (ASTMD2344) Span (4t): 0.34

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	
							Measured	Normalized
AITR1392-ASU1-SBS-B-LH1-ETD-1	0.513	0.2555	0.0874	0.0055	317.00	ILS	10.643	10.574
AITR1392-ASU1-SBS-B-LH1-ETD-2	0.519	0.2555	0.0835	0.0052	291.00	ILS	10.234	9.707
AITR1392-ASU1-SBS-B-LH1-ETD-3	0.517	0.2545	0.0872	0.0054	317.00	ILS	10.717	10.616
AITR1392-ASU1-SBS-B-LH1-ETD-4	0.518	0.2550	0.0884	0.0055	309.00	ILS	10.281	10.328
AITR1392-ASU1-SBS-B-LH1-ETD-5	0.513	0.2555	0.0878	0.0055	NT		NT	NT
AITR1392-ASU1-SBS-B-LH2-ETD-1	0.516	0.2555	0.0860	0.0054	302.00	ILS	10.308	10.074
AITR1392-ASU1-SBS-B-LH2-ETD-2	0.517	0.2555	0.0847	0.0053	291.00	ILS	10.085	9.707
AITR1392-ASU1-SBS-B-LH2-ETD-3	0.517	0.2485	0.0855	0.0053	293.00	ILS	10.343	10.049
AITR1392-ASU1-SBS-B-LH2-ETD-4	0.516	0.2555	0.0853	0.0053	292.00	ILS	10.052	9.740
AITR1392-ASU1-SBS-B-LH2-ETD-5	0.516	0.2565	0.0859	0.0054	NT		NT	NT
Minimum	0.5125	0.2485	0.0835	0.0052	291.00		10.052	9.707
Maximum	0.5190	0.2565	0.0884	0.0055	317.00		10.717	10.616
Average	0.5160	0.2548	0.0862	0.0054	301.50		10.333	10.099
Standard Deviation	0.0019	0.0023	0.0015	0.0001	11.46		0.238	0.375
Coefficient of Variation (%)	0.37	0.88	1.77	1.77	3.80		2.30	3.71
No. Specimens	10	10	10	10	8		8	8

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	ASU1	SBS	LH	ETW			

Test Group: AITR1392-ASU1-SBS-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055

Test Type: Short Beam Shear Condition: ETW #Plies: 16

Test Method: MP1116 (ASTMD2344) Span (4t): 0.35

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	
							Measured	Normalized
AITR1392-ASU1-SBS-B-LH1-ETW-1	0.519	0.2545	0.0912	0.0057	206.00	ILS	6.656	6.899
AITR1392-ASU1-SBS-B-LH1-ETW-2	0.520	0.2550	0.0862	0.0054	NT		NT	NT
AITR1392-ASU1-SBS-B-LH1-ETW-3	0.512	0.2550	0.0853	0.0053	188.00	ILS	6.485	6.283
AITR1392-ASU1-SBS-B-LH1-ETW-4	0.514	0.2550	0.0881	0.0055	213.00	ILS	7.111	7.119
AITR1392-ASU1-SBS-B-LH1-ETW-5	0.516	0.2552	0.0844	0.0053	196.00	ILS	6.823	6.547
AITR1392-ASU1-SBS-B-LH2-ETW-1	0.513	0.2505	0.0865	0.0054	212.00	ILS	7.335	7.213
AITR1392-ASU1-SBS-B-LH2-ETW-2	0.516	0.2445	0.0863	0.0054	209.00	ILS	7.432	7.285
AITR1392-ASU1-SBS-B-LH2-ETW-3	0.514	0.2555	0.0862	0.0054	223.00	ILS	7.597	7.439
AITR1392-ASU1-SBS-B-LH2-ETW-4	0.513	0.2555	0.0855	0.0053	218.00	ILS	7.484	7.272
AITR1392-ASU1-SBS-B-LH2-ETW-5	0.516	0.2460	0.0863	0.0054	NT		NT	NT
Minimum	0.5120	0.2445	0.0844	0.0053	188.00		6.485	6.283
Maximum	0.5195	0.2555	0.0912	0.0057	223.00		7.597	7.439
Average	0.5151	0.2527	0.0866	0.0054	208.13		7.115	7.007
Standard Deviation	0.0025	0.0042	0.0019	0.0001	11.43		0.416	0.403
Coefficient of Variation (%)	0.49	1.66	2.17	2.17	5.49		5.84	5.75
No. Specimens	10	10	10	10	8		8	8

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	ASU1	SBS	LH	ETW2			

Test Group: AITR1392-ASU1-SBS-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055

Test Type: Short Beam Shear Condition: ETW2 #Plies: 16

Test Method: MP1116 (ASTMD2344) Span (4t): 0.34

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	
							Measured	Normalized
AITR1392-ASU1-SBS-B-LH1-ETW2-1	0.513	0.2560	0.0877	0.0055	161.00	ILD/ILS	5.380	5.360
AITR1392-ASU1-SBS-B-LH1-ETW2-2	0.514	0.2560	0.0843	0.0053	162.00	ILD/ILS	5.628	5.393
AITR1392-ASU1-SBS-B-LH1-ETW2-3	0.519	0.2575	0.0858	0.0054	168.00	ILD/ILS	5.701	5.560
AITR1392-ASU1-SBS-B-LH1-ETW2-4	0.516	0.2560	0.0850	0.0053	163.00	ILS	5.620	5.427
AITR1392-ASU1-SBS-B-LH1-ETW2-5	0.511	0.2555	0.0841	0.0053	NT		NT	NT
AITR1392-ASU1-SBS-B-LH2-ETW2-1	0.515	0.2490	0.0863	0.0054	179.00	ILS	6.245	6.127
AITR1392-ASU1-SBS-B-LH2-ETW2-2	0.513	0.2555	0.0859	0.0054	178.00	ILS	6.083	5.938
AITR1392-ASU1-SBS-B-LH2-ETW2-3	0.514	0.2535	0.0867	0.0054	176.00	ILS	6.008	5.917
AITR1392-ASU1-SBS-B-LH2-ETW2-4	0.515	0.2510	0.0867	0.0054	175.00	ILS	6.029	5.942
AITR1392-ASU1-SBS-B-LH2-ETW2-5	0.513	0.2520	0.0868	0.0054	NT		NT	NT
Minimum	0.5105	0.2490	0.0841	0.0053	161.00		5.380	5.360
Maximum	0.5190	0.2575	0.0877	0.0055	179.00		6.245	6.127
Average	0.5142	0.2542	0.0859	0.0054	170.25		5.837	5.708
Standard Deviation	0.0023	0.0027	0.0011	0.0001	7.59		0.295	0.304
Coefficient of Variation (%)	0.44	1.07	1.33	1.33	4.46		5.06	5.33
No. Specimens	10	10	10	10	8		8	8

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	ASU1	OHT1	LH	CTD				

Test Group: AITR1392-ASU1-OHT1-LH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Tension Layup 1 Condition: CTD #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHT1-B-LH1-CTD-1	11.5020	1.5086	0.1304	0.0054	0.2512	88.1830	0.0865	11836.51	60.15	59.44	AGM
AITR1392-ASU1-OHT1-B-LH1-CTD-2	11.5010	1.5085	0.1302	0.0054	0.2516	88.3560	0.0863	11663.64	59.40	58.58	AGM
AITR1392-ASU1-OHT1-B-LH1-CTD-3	11.5020	1.5082	0.1321	0.0055	0.2514	87.0704	0.0876	11766.06	59.06	59.10	AGM
AITR1392-ASU1-OHT1-B-LH1-CTD-4	11.5020	1.5081	0.1309	0.0055	0.2514	87.8910	0.0868	11586.98	58.71	58.21	AGM
AITR1392-ASU1-OHT1-B-LH1-CTD-5	11.5010	1.5078	0.1308	0.0054	0.2513	87.9505	0.0867	NT	NT	NT	
AITR1392-ASU1-OHT1-B-LH2-CTD-1	11.4990	1.5092	0.1303	0.0054	0.2515	88.2728	0.0863	12260.41	62.36	61.54	AGM
AITR1392-ASU1-OHT1-B-LH2-CTD-2	11.4980	1.5091	0.1294	0.0054	0.2509	88.8792	0.0857	11789.80	60.39	59.18	AGM
AITR1392-ASU1-OHT1-B-LH2-CTD-3	11.4980	1.5085	0.1318	0.0055	0.2515	87.2162	0.0874	11655.56	58.61	58.53	AGM
AITR1392-ASU1-OHT1-B-LH2-CTD-4	11.4980	1.5085	0.1291	0.0054	0.2507	89.0627	0.0856	11685.43	60.00	58.68	AGM
AITR1392-ASU1-OHT1-B-LH2-CTD-5	11.5010	1.5095	0.1297	0.0054	0.2506	88.6739	0.0859	NT	NT	NT	
Minimum	11.4980	1.5078	0.1291	0.0054	0.2506	87.0704	0.0856	11586.9790	58.6088	58.207	
Maximum	11.5020	1.5095	0.1321	0.0055	0.2516	89.0627	0.0876	12260.4130	62.3613	61.542	
Average	11.5002	1.5086	0.1305	0.0054	0.2512	88.1556	0.0865	11780.5493	59.8351	59.158	
Standard Deviation	0.0018	0.0005	0.0010	0.0000	0.0004	0.6534	0.0007	210.2731	1.2178	1.044	
Coefficient of Variation (%)	0.02	0.04	0.75	0.75	0.14	0.74	0.77	1.78	2.04	1.76	
No. Specimens	10	10	10	10	10	10	10	8	8	8	

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	ASU1	OHT1	LH	RTD				

Test Group: AITR1392-ASU1-OHT1-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Tension Layup 1 Condition: RTD #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHT1-B-LH1-RTD-1	11.5010	1.5084	0.1310	0.0055	0.2514	87.8162	0.0868	11466.47	58.04	57.59	AGM
AITR1392-ASU1-OHT1-B-LH1-RTD-2	11.5010	1.5076	0.1292	0.0054	0.2506	89.0170	0.0857	11246.77	57.74	56.51	AGM
AITR1392-ASU1-OHT1-B-LH1-RTD-3	11.5010	1.5075	0.1299	0.0054	0.2511	88.5146	0.0862	11306.47	57.72	56.82	AGM
AITR1392-ASU1-OHT1-B-LH1-RTD-4	11.5020	1.5085	0.1306	0.0054	0.2495	88.0704	0.0866	11202.57	56.86	56.26	AGM
AITR1392-ASU1-OHT1-B-LH1-RTD-5					0.0000			NT	NT	NT	
AITR1392-ASU1-OHT1-B-LH2-RTD-1	11.5010	1.5093	0.1295	0.0054	0.2514	88.7880	0.0858	11127.44	56.92	55.85	AGM
AITR1392-ASU1-OHT1-B-LH2-RTD-2	11.5040	1.5091	0.1296	0.0054	0.2513	88.7426	0.0859	11822.80	60.43	59.35	AGM
AITR1392-ASU1-OHT1-B-LH2-RTD-3	11.5010	1.5092	0.1297	0.0054	0.2511	88.6511	0.0860	11075.23	56.57	55.60	AGM
AITR1392-ASU1-OHT1-B-LH2-RTD-4	11.5010	1.5093	0.1298	0.0054	0.2509	88.5828	0.0860	11169.69	57.00	56.06	AGM
AITR1392-ASU1-OHT1-B-LH2-RTD-5	11.5010	1.5094	0.1314	0.0055	0.2515	87.5488	0.0870	NT	NT	NT	
Minimum	11.5010	1.5075	0.1292	0.0054	0.0000	87.5488	0.0857	11075.2280	56.5671	55.596	
Maximum	11.5040	1.5094	0.1314	0.0055	0.2515	89.0170	0.0870	11822.8030	60.4333	59.350	
Average	11.5014	1.5087	0.1301	0.0054	0.2259	88.4146	0.0862	11302.1786	57.6606	56.756	
Standard Deviation	0.0010	0.0007	0.0007	0.0000	0.0794	0.4912	0.0005	242.2063	1.2344	1.217	
Coefficient of Variation (%)	0.01	0.05	0.56	0.56	35.14	0.56	0.55	2.14	2.14	2.14	
No. Specimens	9	9	9	9	10	9	9	8	8	8	

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	ASU1	OHT1	LH	ETW2				

Test Group: AITR1392-ASU1-OHT1-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Tension Layup 1 Condition: ETW2 #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHT1-B-LH1-ETW2-1	11.4950	1.5060	0.1314	0.0055	0.2508	87.4810	0.0873	11674.67	59.00	58.73	AGM
AITR1392-ASU1-OHT1-B-LH1-ETW2-2	11.4954	1.5045	0.1309	0.0055	0.2500	87.8406	0.0870	10800.88	54.86	54.39	AGM
AITR1392-ASU1-OHT1-B-LH1-ETW2-3	11.4958	1.5060	0.1312	0.0055	0.2510	87.6427	0.0871	10607.85	53.70	53.36	AGM
AITR1392-ASU1-OHT1-B-LH1-ETW2-4	11.4951	1.5058	0.1310	0.0055	0.2511	87.7489	0.0870	11006.34	55.79	55.37	AGM
AITR1392-ASU1-OHT1-B-LH1-ETW2-5	11.4954	1.5073	0.1297	0.0054	0.2510	88.6535	0.0860	NT	NT	NT	
AITR1392-ASU1-OHT1-B-LH2-ETW2-1	11.4941	1.5070	0.1299	0.0054	0.2511	88.4615	0.0862	10734.93	54.82	53.96	AGM
AITR1392-ASU1-OHT1-B-LH2-ETW2-2	11.4945	1.5062	0.1300	0.0054	0.2507	88.4192	0.0863	11235.69	57.38	56.51	AGM
AITR1392-ASU1-OHT1-B-LH2-ETW2-3	11.4945	1.5058	0.1306	0.0054	0.2512	88.0355	0.0867	11136.61	56.64	56.03	AGM
AITR1392-ASU1-OHT1-B-LH2-ETW2-4	11.4949	1.5065	0.1315	0.0055	0.2511	87.4137	0.0873	11427.83	57.69	57.47	AGM
AITR1392-ASU1-OHT1-B-LH2-ETW2-5	11.4938	1.5072	0.1320	0.0055	0.2508	87.0962	0.0876	NT	NT	NT	
Minimum	11.4938	1.5045	0.1297	0.0054	0.2500	87.0962	0.0860	10607.8450	53.7005	53.362	
Maximum	11.4958	1.5073	0.1320	0.0055	0.2512	88.6535	0.0876	11674.6720	58.9962	58.728	
Average	11.4949	1.5062	0.1308	0.0055	0.2509	87.8793	0.0868	11078.0993	56.2355	55.728	
Standard Deviation	0.0006	0.0008	0.0008	0.0000	0.0003	0.5074	0.0005	363.9808	1.7615	1.827	
Coefficient of Variation (%)	0.01	0.06	0.58	0.58	0.14	0.58	0.59	3.29	3.13	3.28	
No. Specimens	10	10	10	10	10	10	10	8	8	8	

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	ASU1	OHC1	LH	RTD						

Test Group: AITR1392-ASU1-OHC1-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Compression Layup 1 Condition: RTD #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHC1-B-LH1-RTD-1	12.0054	1.5084	0.1302	0.0054	0.2515	0.6257	5.8695	5.9977	1.9311	8777.00	44.68	44.08	MGM
AITR1392-ASU1-OHC1-B-LH1-RTD-2	12.0055	1.5085	0.1299	0.0054	0.2512	0.6246	5.87	6.0050	1.9343	8443.00	43.10	42.40	MGM
AITR1392-ASU1-OHC1-B-LH1-RTD-3	12.0058	1.5086	0.1296	0.0054	0.2509	0.6244	5.869	6.0129	1.9355	8287.00	42.37	41.61	MGM
AITR1392-ASU1-OHC1-B-LH1-RTD-4	12.0054	1.5090	0.1289	0.0054	0.2516	0.6298	5.8685	5.9976	1.9519	8524.00	43.82	42.79	MGM
AITR1392-ASU1-OHC1-B-LH1-RTD-5	12.0051	1.5086	0.1296	0.0054	0.2511	0.6270	5.8685	6.0078	1.9370	NT	NT	NT	
AITR1392-ASU1-OHC1-B-LH2-RTD-1	12.0059	1.5089	0.1304	0.0054	0.2513	0.6231	5.8695	6.0044	1.9267	8903.00	45.24	44.70	MGM
AITR1392-ASU1-OHC1-B-LH2-RTD-2	12.0061	1.5082	0.1322	0.0055	0.2513	0.6245	5.8665	6.0016	1.9014	8544.00	42.86	42.92	MGM
AITR1392-ASU1-OHC1-B-LH2-RTD-3	12.0061	1.5095	0.1298	0.0054	0.2512	0.6244	5.87	6.0093	1.9358	8767.00	44.76	44.00	MGM
AITR1392-ASU1-OHC1-B-LH2-RTD-4	12.0061	1.5080	0.1314	0.0055	0.2512	0.6213	5.8715	6.0032	1.9112	8290.00	41.83	41.65	MGM
AITR1392-ASU1-OHC1-B-LH2-RTD-5					0.0000					NT	NT	NT	
Minimum	12.0051	1.5080	0.1289	0.0054	0.0000	0.6213	5.8665	5.9976	1.9014	8287.0000	41.8261	41.614	
Maximum	12.0061	1.5095	0.1322	0.0055	0.2516	0.6298	5.8715	6.0129	1.9519	8903.0000	45.2363	44.699	
Average	12.0057	1.5086	0.1302	0.0054	0.2261	0.6250	5.8692	6.0044	1.9294	8566.8750	43.5818	43.019	
Standard Deviation	0.0004	0.0005	0.0010	0.0000	0.0795	0.0024	0.0014	0.0051	0.0150	229.8692	1.2345	1.147	
Coefficient of Variation (%)	0.00	0.03	0.77	0.77	35.14	0.38	0.02	0.08	0.78	2.68	2.83	2.67	
No. Specimens	9	9	9	9	10	9	9	9	9	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	ASU1	OHC1	LH	ETW						

Test Group: AITR1392-ASU1-OHC1-LH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Compression Layup 1 Condition: ETW #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHC1-B-LH1-ETW-1	12.0065	1.5065	0.1304	0.0054	0.2514	0.6240	5.8695	5.9924	1.9279	7151.00	36.40	35.96	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW-2	11.9975	1.5067	0.1307	0.0054	0.2511	0.6215	5.8825	6.0003	1.9217	7170.00	36.42	36.05	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW-3	12.0059	1.5067	0.1303	0.0054	0.2510	0.6240	5.874	6.0027	1.9263	7245.00	36.90	36.43	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW-4	12.0061	1.5070	0.1315	0.0055	0.2512	0.6275	5.8655	5.9992	1.9098	7563.00	38.15	38.02	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW-5	12.0058	1.5068	0.1302	0.0054	0.2504	0.6250	5.874	6.0177	1.9237	NT	NT	NT	
AITR1392-ASU1-OHC1-B-LH2-ETW-1	12.0073	1.5070	0.1326	0.0055	0.2504	0.6235	5.8715	6.0184	1.8884	7122.00	35.64	35.80	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW-2	12.0073	1.5067	0.1320	0.0055	0.2509	0.6240	5.872	6.0050	1.9008	7663.00	38.53	38.53	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW-3	12.0080	1.5067	0.1320	0.0055	0.2505	0.6225	5.8705	6.0146	1.8972	7066.00	35.52	35.53	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW-4	12.0066	1.5073	0.1320	0.0055	0.2511	0.6240	5.873	6.0029	1.9018	7466.00	37.51	37.52	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW-5	12.0075	1.5082	0.1323	0.0055	0.2507	0.6225	5.871	6.0158	1.8949	NT	NT	NT	
Minimum	11.9975	1.5065	0.1302	0.0054	0.2504	0.6215	5.8655	5.9924	1.8884	7066.0000	35.5200	35.529	
Maximum	12.0080	1.5082	0.1326	0.0055	0.2514	0.6275	5.8825	6.0184	1.9279	7663.0000	38.5308	38.531	
Average	12.0058	1.5070	0.1314	0.0055	0.2509	0.6239	5.8724	6.0069	1.9093	7305.7500	36.8857	36.731	
Standard Deviation	0.0030	0.0005	0.0009	0.0000	0.0004	0.0016	0.0043	0.0091	0.0146	225.7671	1.1070	1.133	
Coefficient of Variation (%)	0.03	0.03	0.70	0.70	0.14	0.26	0.07	0.15	0.76	3.09	3.00	3.08	
No. Specimens	10	10	10	10	10	10	10	10	10	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	ASU1	OHC1	LH	ETW2						

Test Group: AITR1392-ASU1-OHC1-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

Test Type: Open-Hole Compression Layup 1 Condition: ETW2 #Plies: 24

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 Measured	Ultimate Strength, ksi Normalized	Failure Mode
AITR1392-ASU1-OHC1-B-LH1-ETW2-1	12.0062	1.5068	0.1305	0.0054	0.2514	0.6245	5.868	5.9938	1.9269	6614.00	33.64	33.25	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW2-2	12.0062	1.5068	0.1301	0.0054	0.2513	0.6260	5.8715	5.9962	1.9321	6935.00	35.38	34.87	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW2-3	12.0057	1.5065	0.1307	0.0054	0.2511	0.6240	5.8685	5.9996	1.9207	7196.00	36.54	36.19	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW2-4	12.0058	1.5065	0.1313	0.0055	0.2516	0.6230	5.8685	5.9877	1.9167	7222.00	36.52	36.32	LGM
AITR1392-ASU1-OHC1-B-LH1-ETW2-5	12.0057	1.5060	0.1297	0.0054	0.2509	0.6235	5.872	6.0024	1.9340	NT	NT	NT	
AITR1392-ASU1-OHC1-B-LH2-ETW2-1	12.0072	1.5052	0.1311	0.0055	0.2511	0.6215	5.8725	5.9943	1.9153	7075.00	35.85	35.61	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW2-2	12.0069	1.5072	0.1312	0.0055	0.2511	0.6235	5.874	6.0023	1.9144	7095.00	35.89	35.66	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW2-3	12.0069	1.5073	0.1309	0.0055	0.2512	0.6235	5.8735	6.0005	1.9195	7279.00	36.90	36.58	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW2-4	12.0067	1.5070	0.1343	0.0056	0.2511	0.6235	5.8705	6.0016	1.8692	6893.00	34.05	34.65	LGM
AITR1392-ASU1-OHC1-B-LH2-ETW2-5	12.0069	1.5073	0.1334	0.0056	0.2512	0.6235	5.869	6.0005	1.8831	NT	NT	NT	
Minimum	12.0057	1.5052	0.1297	0.0054	0.2509	0.6215	5.8680	5.9877	1.8692	6614.0000	33.6434	33.253	
Maximum	12.0072	1.5073	0.1343	0.0056	0.2516	0.6260	5.8740	6.0024	1.9340	7279.0000	36.9006	36.584	
Average	12.0064	1.5067	0.1313	0.0055	0.2512	0.6237	5.8708	5.9979	1.9132	7038.6250	35.5974	35.391	
Standard Deviation	0.0006	0.0007	0.0014	0.0001	0.0002	0.0011	0.0022	0.0048	0.0209	218.0845	1.1859	1.097	
Coefficient of Variation (%)	0.00	0.04	1.10	1.10	0.08	0.18	0.04	0.08	1.09	3.10	3.33	3.10	
No. Specimens	10	10	10	10	10	10	10	10	10	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	ASU1	ILT1	LH	RTD						

Test Group: AITR1392-ASU1-ILT1-LH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Fiber Volume: 58.72

Test Type: Interlaminar Tension Layup 1 Condition: RTD #Plies: 32

Test Method: MP1122 (ASTMD6415)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	ASTM D6415 Spec. Dimensions*					Ultimate (peak)**						Failure
	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
AITR1392-ASU1-ILT1-B-LH1-RTD-1	0.1738	1.009	0.2500	0.4238	90.0000	0.9963	35.2073	0.266	470.000	280.95	7.448	ILT
AITR1392-ASU1-ILT1-B-LH1-RTD-2	0.1787	1.009	0.2500	0.4287	90.0000	0.9916	34.7420	0.278	549.000	324.12	8.312	ILT
AITR1392-ASU1-ILT1-B-LH1-RTD-3	0.1735	1.009	0.2500	0.4235	90.0000	1.0376	37.1400	0.225	410.000	262.13	6.965	ILT
AITR1392-ASU1-ILT1-B-LH1-RTD-4	0.1768	1.008	0.2500	0.4268	90.0000	1.0163	36.0104	0.251	486.000	299.38	7.774	ILT
AITR1392-ASU1-ILT1-B-LH1-RTD-5										NT	NT	
AITR1392-ASU1-ILT1-B-LH1-RTD-6										NT	NT	
AITR1392-ASU1-ILT1-B-LH1-RTD-7										NT	NT	
Minimum	0.1735	1.0085	0.2500	0.4235	90.0000	0.9916	34.7420	0.2246	410.0000	262.13	6.965	
Maximum	0.1787	1.0087	0.2500	0.4287	90.0000	1.0376	37.1400	0.2779	549.0000	324.12	8.312	
Average	0.1757	1.0086	0.2500	0.4257	90.0000	1.0104	35.7749	0.2548	478.7500	291.64	7.625	
Standard Deviation	0.0025	0.0001	0.0000	0.0025	0.0000	0.0210	1.0501	0.0231	57.1278	26.46	0.566	
Coefficient of Variation (%)	1.41	0.01	0.00	0.58	0.00	2.08	2.94	9.05	11.93	9.07	7.43	
No. Specimens	4	4	4	4	4	4	4	4	4	4	4	

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	ILT1	LH	ETW2						

Test Group: AITR1392-ASU1-ILT1-LH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: NA Fiber Volume: 58.72

Test Type: Interlaminar Tension Layup 1 Condition: ETW2 #Plies: 32

Test Method: MP1122 (ASTMD6415)

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	ASTM D6415 Spec. Dimensions*					Ultimate (peak)**						Failure
	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
AITR1392-ASU1-ILT1-B-LH1-ETW2-1	0.1800	1.007	0.2500	0.4300	90.0000	1.1173	40.2204	0.154	202.000	145.62	3.701	ILT
AITR1392-ASU1-ILT1-B-LH1-ETW2-2	0.1727	1.006	0.2500	0.4227	90.0000	1.0882	39.3630	0.173	245.000	170.26	4.550	ILT
AITR1392-ASU1-ILT1-B-LH1-ETW2-3	0.1735	1.008	0.2500	0.4235	90.0000	1.1239	40.7674	0.138	193.000	141.33	3.755	ILT
AITR1392-ASU1-ILT1-B-LH1-ETW2-4	0.1718	1.007	0.2500	0.4218	90.0000	1.0899	39.4710	0.170	218.000	151.86	4.082	ILT
AITR1392-ASU1-ILT1-B-LH1-ETW2-5										NT	NT	
AITR1392-ASU1-ILT1-B-LH1-ETW2-6										NT	NT	
AITR1392-ASU1-ILT1-B-LH1-ETW2-7										NT	NT	
Minimum	0.1718	1.0060	0.2500	0.4218	90.0000	1.0882	39.3630	0.1382	193.0000	141.33	3.701	
Maximum	0.1800	1.0077	0.2500	0.4300	90.0000	1.1239	40.7674	0.1728	245.0000	170.26	4.550	
Average	0.1745	1.0070	0.2500	0.4245	90.0000	1.1048	39.9554	0.1587	214.5000	152.27	4.022	
Standard Deviation	0.0037	0.0007	0.0000	0.0037	0.0000	0.0184	0.6621	0.0160	22.8108	12.75	0.390	
Coefficient of Variation (%)	2.14	0.07	0.00	0.88	0.00	1.67	1.66	10.06	10.63	8.37	9.70	
No. Specimens	4	4	4	4	4	4	4	4	4	4	4	

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

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

ACG MTM45-1 - AS4 UNI

normalizing t_{ply} [in]: 0.005500

ACG Specimen Name	ACG Batch #	ACG Cure Cycle	Prepreg Lot #	Cure Cycle #	Measured Impact Energy (in-lbf)	Strength [ksi]	Avg. Specimen Thickn. [in]	# Plies in Laminate	Failure Mode	Avg. t_{ply} [in]	$Strength_{norm}$ [ksi]
ASU1-CAI1-B-LH1-RTD-1	B	LH1	1	1	254.950	29.183	0.171	32	LDM	0.0054	28.404
ASU1-CAI1-B-LH1-RTD-2	B	LH1	1	1	255.130	25.561	0.171	32	LDM	0.0054	24.878
ASU1-CAI1-B-LH1-RTD-3	B	LH1	1	1	254.130	25.866	0.171	32	LDM	0.0053	25.116
ASU1-CAI1-B-LH1-RTD-4	B	LH1	1	1	254.870	29.488	0.170	32	LDM	0.0053	28.483

Average	**27.524**	**$Average_{norm}$**	**0.0053**	**26.720**
Standard Dev.	**2.099**	**$Standard\ Dev._{norm}$**		**1.992**
Coeff. of Var. [%]	**7.625**	**$Coeff.\ of\ Var.\ [\%]_{norm}$**		**7.456**
Min.	**25.561**	**Min.**	**0.0053**	**24.878**
Max.	**29.488**	**Max.**	**0.0054**	**28.483**
Number of Spec.	**4**	**Number of Spec.**		**4**