Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition	Orientation			
	AITR	1392	ASU1	LT	MH	CTD	[0]16			

Test Group: AITR1392-ASU1-LT-MH-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%

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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-A-MH1-CTD-1	10.032	1.0058	0.0895	0.0056	NT		251.048	255.423	17.43	17.730	NT
AITR1392-ASU1-LT-A-MH1-CTD-2	10.038	1.0052	0.0920	0.0058	NT		260.450	272.289	19.34	20.217	NT
AITR1392-ASU1-LT-A-MH1-CTD-3	10.037	1.0054	0.0909	0.0057	NT		262.286	270.930	19.24	19.875	NT
AITR1392-ASU1-LT-A-MH1-CTD-4	10.040	1.0053	0.0893	0.0056	NT		278.123	282.337	NT		NT
AITR1392-ASU1-LT-A-MH2-CTD-1	10.036	0.9997	0.0862	0.0054	NT		290.524	284.581	18.65	18.272	NT
AITR1392-ASU1-LT-A-MH2-CTD-2	10.031	1.0074	0.0903	0.0056	NT		229.338	235.332	18.93	19.421	NT
AITR1392-ASU1-LT-A-MH2-CTD-3	10.039	1.0074	0.0909	0.0057	NT		255.635	264.059	18.43	19.036	NT
AITR1392-ASU1-LT-A-MH2-CTD-4	10.032	1.0070	0.0879	0.0055	NT				NT		NT
AITR1392-ASU1-LT-B-MH1-CTD-1	10.031	1.0082	0.0891	0.0056	NT				18.28	18.504	NT
AITR1392-ASU1-LT-B-MH1-CTD-2	10.031	1.0090	0.0884	0.0055	NT				19.17	19.259	NT
AITR1392-ASU1-LT-B-MH1-CTD-3	10.037	1.0084	0.0885	0.0055	NT		252.770	254.111	18.69	18.789	NT
AITR1392-ASU1-LT-B-MH1-CTD-4	10.032	1.0087	0.0877	0.0055	NT		257.881	257.100	NT		NT
AITR1392-ASU1-LT-B-MH2-CTD-1	10.036	1.0073	0.0814	0.0051	NT		287.969	266.262	20.09	18.578	NT
AITR1392-ASU1-LT-B-MH2-CTD-2	10.039	1.0066	0.0842	0.0053	NT		255.858	244.906	20.00	19.140	NT
AITR1392-ASU1-LT-B-MH2-CTD-3	10.041	1.0067	0.0819	0.0051	NT		286.222	266.273	19.74	18.360	NT
AITR1392-ASU1-LT-B-MH2-CTD-4	10.035	1.0068	0.0853	0.0053	NT		285.013	276.376	NT		NT
AITR1392-ASU1-LT-C-MH1-CTD-1	10.067	1.0083	0.0840	0.0053	NT		284.023	271.113	18.39	17.550	NT
AITR1392-ASU1-LT-C-MH1-CTD-2	10.064	1.0073	0.0841	0.0053	NT		263.728	252.040	18.79	17.958	NT
AITR1392-ASU1-LT-C-MH1-CTD-3	10.066	1.0078	0.0834	0.0052	NT		251.952	238.686	19.62	18.589	NT
AITR1392-ASU1-LT-C-MH1-CTD-4	10.067	1.0075	0.0860	0.0054	NT		286.682	280.275	NT		NT
AITR1392-ASU1-LT-C-MH2-CTD-1	10.064	1.0095	0.0881	0.0055	NT		292.729	293.062	19.90	19.921	NT
AITR1392-ASU1-LT-C-MH2-CTD-2	10.068	1.0097	0.0888	0.0055	NT		255.609	257.835	17.69	17.848	NT
AITR1392-ASU1-LT-C-MH2-CTD-3	10.065	1.0096	0.0856	0.0054	NT		247.651	240.897	18.85	18.335	NT
AITR1392-ASU1-LT-C-MH2-CTD-4	10.063	1.0095	0.0862	0.0054	NT		266.673	261.218	NT		NT
Minimum	10.0306	0.9997	0.0814	0.0051			229.338	235.332	17.426	17.550	
Maximum	10.0678	1.0097	0.0920	0.0058			292.729	293.062	20.093	20.217	
Average	10.0454	1.0073	0.0871	0.0054			266.770	263.100	18.956	18.744	
Standard Deviation	0.0149	0.0021	0.0029	0.0002			17.560	15.735	0.758	0.779	
Coefficient of Variation (%)	0.15	0.21	3.35	3.35			6.58	5.98	4.00	4.16	
No. Specimens	24	24	24	24			21	21	18	18	

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	Orientation			
	AITR	1392	ASU1	LT	MH	RTD	[0]16			

Test Group: AITR1392-ASU1-LT-MH-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%

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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-A-MH1-RTD-1	10.043	1.0055	0.0889	0.0056	NT		287.777	290.721	18.37	18.560	NT
AITR1392-ASU1-LT-A-MH1-RTD-2	10.037	1.0055	0.0892	0.0056	NT				18.48	18.734	NT
AITR1392-ASU1-LT-A-MH1-RTD-3	10.040	1.0050	0.0894	0.0056	NT		266.284	270.520	19.91	20.227	NT
AITR1392-ASU1-LT-A-MH1-RTD-4	10.039	1.0055	0.0877	0.0055	NT		275.603	274.663	NT		NT
AITR1392-ASU1-LT-A-MH2-RTD-1	10.031	1.0069	0.0889	0.0056	NT		281.035	283.803	19.12	19.309	NT
AITR1392-ASU1-LT-A-MH2-RTD-2	10.038	1.0068	0.0898	0.0056	NT		279.354	285.068	18.38	18.751	NT
AITR1392-ASU1-LT-A-MH2-RTD-3	10.035	1.0071	0.0902	0.0056	NT		252.587	258.902	18.77	19.237	NT
AITR1392-ASU1-LT-A-MH2-RTD-4	10.038	1.0072	0.0885	0.0055	NT		280.661	282.150	NT		NT
AITR1392-ASU1-LT-B-MH1-RTD-1	10.030	1.0086	0.0875	0.0055	NT		292.033	290.263	18.28	18.165	NT
AITR1392-ASU1-LT-B-MH1-RTD-2	10.031	1.0088	0.0883	0.0055	NT		263.453	264.252	18.50	18.556	NT
AITR1392-ASU1-LT-B-MH1-RTD-3	10.030	1.0084	0.0885	0.0055	NT		226.922	228.298	18.20	18.307	NT
AITR1392-ASU1-LT-B-MH1-RTD-4	10.028	1.0087	0.0903	0.0056	NT				NT		NT
AITR1392-ASU1-LT-B-MH2-RTD-1	10.037	1.0063	0.0816	0.0051	NT		279.414	258.987	19.68	18.242	NT
AITR1392-ASU1-LT-B-MH2-RTD-2	10.036	1.0070	0.0842	0.0053	NT		280.804	268.785	19.51	18.671	NT
AITR1392-ASU1-LT-B-MH2-RTD-3	10.032	1.0069	0.0817	0.0051	NT		281.230	261.097	19.74	18.327	NT
AITR1392-ASU1-LT-B-MH2-RTD-4	10.042	1.0069	0.0824	0.0052	NT				NT		NT
AITR1392-ASU1-LT-C-MH1-RTD-1	10.067	1.0079	0.0842	0.0053	NT		281.641	269.372	18.48	17.673	NT
AITR1392-ASU1-LT-C-MH1-RTD-2	10.072	1.0080	0.0849	0.0053	NT		285.526	275.468	18.95	18.286	NT
AITR1392-ASU1-LT-C-MH1-RTD-3	10.064	1.0080	0.0874	0.0055	NT		281.540	279.621	18.48	18.353	NT
AITR1392-ASU1-LT-C-MH1-RTD-4	10.067	1.0081	0.0851	0.0053	NT				NT		NT
AITR1392-ASU1-LT-C-MH2-RTD-1	10.063	1.0096	0.0839	0.0052	NT		284.076	270.733	18.39	17.530	NT
AITR1392-ASU1-LT-C-MH2-RTD-2	10.068	1.0097	0.0862	0.0054	NT		271.660	266.206	18.56	18.186	NT
AITR1392-ASU1-LT-C-MH2-RTD-3	10.065	1.0095	0.0868	0.0054	NT		269.289	265.514	18.38	18.124	NT
AITR1392-ASU1-LT-C-MH2-RTD-4	10.064	1.0097	0.0868	0.0054	NT				NT		NT
Minimum	10.0278	1.0050	0.0816	0.0051			226.922	228.298	18.197	17.530	
Maximum	10.0722	1.0097	0.0903	0.0056			292.033	290.721	19.910	20.227	
Average	10.0457	1.0076	0.0868	0.0054			274.784	270.759	18.787	18.513	
Standard Deviation	0.0154	0.0014	0.0027	0.0002			14.868	14.282	0.559	0.619	
Coefficient of Variation (%)	0.15	0.14	3.09	3.09			5.41	5.27	2.98	3.34	
No. Specimens	24	24	24	24			19	19	18	18	

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	Orientation			
	AITR	1392	ASU1	LT	MH	ETW	[0]16			

Test Group: AITR1392-ASU1-LT-MH-ETW

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

Test Type: Longitudinal 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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LT-A-MH1-ETW-1	10.036	1.0075	0.0903	0.0056	NT		258.316	264.970	18.30	18.770	NT
AITR1392-ASU1-LT-A-MH1-ETW-2	10.044	1.0081	0.0924	0.0058	NT		268.558	281.885	17.89	18.782	NT
AITR1392-ASU1-LT-A-MH1-ETW-3	10.036	1.0075	0.0892	0.0056	NT		252.789	256.140	18.72	18.971	NT
AITR1392-ASU1-LT-A-MH1-ETW-4	10.043	1.0074	0.0892	0.0056	NT				NT		NT
AITR1392-ASU1-LT-A-MH2-ETW-1	10.041	1.0098	0.0872	0.0055	NT		263.266	260.873	18.86	18.686	NT
AITR1392-ASU1-LT-A-MH2-ETW-2	10.032	1.0100	0.0880	0.0055	NT		264.161	264.060	18.72	18.709	NT
AITR1392-ASU1-LT-A-MH2-ETW-3	10.033	1.0095	0.0904	0.0056	NT		264.829	271.951	18.91	19.419	NT
AITR1392-ASU1-LT-A-MH2-ETW-4	10.032	1.0101	0.0878	0.0055	NT				NT		NT
AITR1392-ASU1-LT-B-MH1-ETW-1	10.033	1.0106	0.0882	0.0055	NT		249.364	249.930	19.59	19.632	NT
AITR1392-ASU1-LT-B-MH1-ETW-2	10.031	1.0112	0.0895	0.0056	NT		252.817	257.223	17.87	18.177	NT
AITR1392-ASU1-LT-B-MH1-ETW-3	10.033	1.0110	0.0903	0.0056	NT		251.322	257.890	18.34	18.821	NT
AITR1392-ASU1-LT-B-MH1-ETW-4	10.031	1.0114	0.0887	0.0055	NT				NT		NT
AITR1392-ASU1-LT-B-MH2-ETW-1	10.035	1.0086	0.0829	0.0052	NT		246.995	232.774	19.63	18.502	NT
AITR1392-ASU1-LT-B-MH2-ETW-2	10.039	1.0081	0.0845	0.0053	NT		252.900	242.937	20.49	19.682	NT
AITR1392-ASU1-LT-B-MH2-ETW-3	10.038	1.0082	0.0853	0.0053	NT		264.690	256.669	19.45	18.864	NT
AITR1392-ASU1-LT-B-MH2-ETW-4	10.033	1.0089	0.0856	0.0054	NT				NT		NT
AITR1392-ASU1-LT-C-MH1-ETW-1	10.066	1.0101	0.0869	0.0054	NT		266.632	263.400	17.89	17.668	NT
AITR1392-ASU1-LT-C-MH1-ETW-2	10.061	1.0106	0.0841	0.0053	NT		224.771	214.724	18.36	17.538	NT
AITR1392-ASU1-LT-C-MH1-ETW-3	10.061	1.0099	0.0854	0.0053	NT		255.987	248.327	18.75	18.192	NT
AITR1392-ASU1-LT-C-MH1-ETW-4	10.057	1.0102	0.0876	0.0055	NT				NT		NT
AITR1392-ASU1-LT-C-MH2-ETW-1	10.069	1.0116	0.0861	0.0054	NT		272.039	266.269	18.39	18.003	NT
AITR1392-ASU1-LT-C-MH2-ETW-2	10.066	1.0113	0.0882	0.0055	NT		254.296	254.970	19.04	19.091	NT
AITR1392-ASU1-LT-C-MH2-ETW-3	10.068	1.0118	0.0886	0.0055	NT		273.538	275.507	18.16	18.294	NT
AITR1392-ASU1-LT-C-MH2-ETW-4	10.073	1.0119	0.0889	0.0056	NT				NT		NT
Minimum	10.0310	1.0074	0.0829	0.0052			224.771	214.724	17.866	17.538	
Maximum	10.0729	1.0119	0.0924	0.0058			273.538	281.885	20.489	19.682	
Average	10.0454	1.0098	0.0877	0.0055			257.626	256.694	18.742	18.656	
Standard Deviation	0.0149	0.0015	0.0023	0.0001			11.431	15.609	0.702	0.605	
Coefficient of Variation (%)	0.15	0.14	2.59	2.59			4.44	6.08	3.75	3.24	
No. Specimens	24	24	24	24			18	18	18	18	

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	Orientation			
	AITR	1392	ASU1	LT	MH	ETW2	[0]16			

Test Group: AITR1392-ASU1-LT-MH-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%

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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-A-MH1-ETW2-1	10.035	1.0078	0.0888	0.0055	NT		270.584	272.942	21.74	21.927	NT
AITR1392-ASU1-LT-A-MH1-ETW2-2	10.038	1.0073	0.0902	0.0056	NT		275.518	282.510	GE		NT
AITR1392-ASU1-LT-A-MH1-ETW2-3	10.037	1.0074	0.0911	0.0057	NT		286.043	296.227	21.67	22.443	NT
AITR1392-ASU1-LT-A-MH1-ETW2-4	10.040	1.0075	0.0822	0.0051	NT				NT		NT
AITR1392-ASU1-LT-A-MH2-ETW2-1	10.037	1.0089	0.0865	0.0054	NT		265.966	261.533	22.18	21.809	NT
AITR1392-ASU1-LT-A-MH2-ETW2-2	10.036	1.0100	0.0886	0.0055	NT		276.592	278.373	NT		NT
AITR1392-ASU1-LT-A-MH2-ETW2-3	10.035	1.0100	0.0881	0.0055	NT		262.758	262.957	NT		NT
AITR1392-ASU1-LT-A-MH2-ETW2-4	10.036	1.0098	0.0894	0.0056	NT				19.70	20.023	NT
AITR1392-ASU1-LT-B-MH1-ETW2-1	10.028	1.0111	0.0889	0.0056	NT		266.069	268.790	GE		NT
AITR1392-ASU1-LT-B-MH1-ETW2-2	10.031	1.0100	0.0888	0.0056	NT		277.321	279.947	22.56	22.777	NT
AITR1392-ASU1-LT-B-MH1-ETW2-3	10.030	1.0111	0.0910	0.0057	NT		243.034	251.320	21.99	22.743	NT
AITR1392-ASU1-LT-B-MH1-ETW2-4	10.031	1.0116	0.0914	0.0057	NT				NT		NT
AITR1392-ASU1-LT-B-MH2-ETW2-1	10.034	1.0089	0.0868	0.0054	NT		268.670	264.904	23.94	23.603	NT
AITR1392-ASU1-LT-B-MH2-ETW2-2	10.036	1.0085	0.0830	0.0052	NT		272.299	256.930	GE		NT
AITR1392-ASU1-LT-B-MH2-ETW2-3	10.035	1.0087	0.0840	0.0053	NT		276.139	263.587	23.80	22.719	NT
AITR1392-ASU1-LT-B-MH2-ETW2-4	10.035	1.0084	0.0811	0.0051	NT				NT		NT
AITR1392-ASU1-LT-C-MH1-ETW2-1	10.068	1.0100	0.0865	0.0054	NT		272.274	267.530	22.01	21.622	NT
AITR1392-ASU1-LT-C-MH1-ETW2-2	10.065	1.0102	0.0853	0.0053	NT		285.323	276.569	23.24	22.524	NT
AITR1392-ASU1-LT-C-MH1-ETW2-3	10.068	1.0101	0.0850	0.0053	NT		276.506	266.975	22.44	21.662	NT
AITR1392-ASU1-LT-C-MH1-ETW2-4	10.068	1.0105	0.0862	0.0054	NT				NT		NT
AITR1392-ASU1-LT-C-MH2-ETW2-1	10.067	1.0114	0.0848	0.0053	NT		262.793	253.336	23.05	22.222	NT
AITR1392-ASU1-LT-C-MH2-ETW2-2	10.066	1.0120	0.0831	0.0052	NT		272.115	256.964	20.66	19.511	NT
AITR1392-ASU1-LT-C-MH2-ETW2-3	10.069	1.0120	0.0856	0.0053	NT		270.850	263.360	21.08	20.493	NT
AITR1392-ASU1-LT-C-MH2-ETW2-4	10.066	1.0119	0.0854	0.0053	NT				23.11	22.429	NT
Minimum	10.0279	1.0073	0.0811	0.0051			243.034	251.320	19.702	19.511	
Maximum	10.0690	1.0120	0.0914	0.0057			286.043	296.227	23.939	23.603	
Average	10.0455	1.0098	0.0867	0.0054			271.158	268.042	22.211	21.900	
Standard Deviation	0.0159	0.0015	0.0029	0.0002			9.569	11.409	1.160	1.117	
Coefficient of Variation (%)	0.16	0.15	3.37	3.37			3.53	4.26	5.22	5.10	
No. Specimens	24	24	24	24			18	18	15	15	

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	Orientation			
	AITR	1392	ASU1	LC	MH	CTD	[0]16			

Test Group: AITR1392-ASU1-LC-MH-CTD

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

Test Type: Longitudinal Compression Condition: CTD

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 (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-ASU1-LC-A-MH1-CTD-1	5.495	0.5067	0.0883	0.0055	NT				16.66	16.725	0.297
AITR1392-ASU1-LC-A-MH1-CTD-2	5.505	0.5069	0.0907	0.0057	NT		201.162	207.410	16.03	16.525	0.317
AITR1392-ASU1-LC-A-MH1-CTD-3	5.503	0.5069	0.0750	0.0047	NT				16.79	14.311	0.253
AITR1392-ASU1-LC-A-MH1-CTD-4	5.505	0.5064	0.0918	0.0057	NT		231.560	241.647	NT		NT
AITR1392-ASU1-LC-A-MH2-CTD-1	5.505	0.5061	0.0887	0.0055	NT		226.318	228.118	16.73	16.859	0.292
AITR1392-ASU1-LC-A-MH2-CTD-2	5.503	0.5034	0.0889	0.0056	NT		233.198	235.671	NT		NT
AITR1392-ASU1-LC-A-MH2-CTD-3	5.503	0.5063	0.0877	0.0055	NT		216.332	215.512	17.37	17.299	0.277
AITR1392-ASU1-LC-A-MH2-CTD-4	5.499	0.5063	0.0883	0.0055	NT		212.181	212.985	17.24	17.307	0.324
AITR1392-ASU1-LC-B-MH1-CTD-1	5.509	0.5078	0.0882	0.0055	NT		229.544	230.065	16.78	16.821	0.303
AITR1392-ASU1-LC-B-MH1-CTD-2	5.508	0.5077	0.0888	0.0056	NT		238.148	240.404	17.22	17.385	0.285
AITR1392-ASU1-LC-B-MH1-CTD-3	5.508	0.5075	0.0864	0.0054	NT		244.953	240.407	17.99	17.658	0.295
AITR1392-ASU1-LC-B-MH1-CTD-4	5.507	0.5082	0.0848	0.0053	NT		239.615	230.902	NT		NT
AITR1392-ASU1-LC-B-MH2-CTD-1	5.508	0.5076	0.0870	0.0054	NT		254.363	251.328	17.52	17.309	0.310
AITR1392-ASU1-LC-B-MH2-CTD-2	5.506	0.5079	0.0869	0.0054	NT		247.151	243.968	18.08	17.850	0.293
AITR1392-ASU1-LC-B-MH2-CTD-3	5.508	0.5080	0.0879	0.0055	NT		248.108	247.685	17.29	17.257	0.287
AITR1392-ASU1-LC-B-MH2-CTD-4	5.508	0.5080	0.0893	0.0056	NT		217.925	221.227	NT		NT
AITR1392-ASU1-LC-C-MH1-CTD-1	5.494	0.5067	0.0851	0.0053	NT		219.999	212.749	17.69	17.110	0.311
AITR1392-ASU1-LC-C-MH1-CTD-2	5.504	0.5073	0.0870	0.0054	NT		259.490	256.443	15.82	15.633	0.250
AITR1392-ASU1-LC-C-MH1-CTD-3	5.505	0.5069	0.0862	0.0054	NT		250.695	245.662	16.34	16.008	0.339
AITR1392-ASU1-LC-C-MH1-CTD-4	5.502	0.5067	0.0854	0.0053	NT		248.572	241.228	NT		NT
AITR1392-ASU1-LC-C-MH2-CTD-1	5.503	0.5071	0.0887	0.0055	NT		235.005	236.963	17.47	17.615	0.375
AITR1392-ASU1-LC-C-MH2-CTD-2	5.503	0.5071	0.0862	0.0054	NT		220.389	215.797	17.26	16.902	0.294
AITR1392-ASU1-LC-C-MH2-CTD-3	5.504	0.5076	0.0850	0.0053	NT		227.861	220.007	16.92	16.341	0.324
AITR1392-ASU1-LC-C-MH2-CTD-4	5.501	0.5089	0.0865	0.0054	NT		227.539	223.661	NT		NT
Minimum	5.4941	0.5034	0.0750	0.0047			201.162	207.410	15.819	14.311	0.2500
Maximum	5.5085	0.5089	0.0918	0.0057			259.490	256.443	18.083	17.850	0.3750
Average	5.5041	0.5071	0.0870	0.0054			233.187	231.811	17.067	16.829	0.3014
Standard Deviation	0.0040	0.0011	0.0031	0.0002			15.046	14.014	0.619	0.854	0.0293
Coefficient of Variation (%)	0.07	0.21	3.58	3.58			6.45	6.05	3.62	5.07	9.72
No. Specimens	24	24	24	24			22	22	18	18	18

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	Orientation			
	AITR	1392	ASU1	LC	MH	RTD	[0]16			

Test Group: AITR1392-ASU1-LC-MH-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%

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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-A-MH1-RTD-1	5.506	0.5013	0.0890	0.0056	NT		208.374	210.742	16.74	16.925	0.380
AITR1392-ASU1-LC-A-MH1-RTD-2	5.505	0.5068	0.0769	0.0048	NT		210.195	183.762	16.46	14.391	0.217
AITR1392-ASU1-LC-A-MH1-RTD-3	5.505	0.5066	0.0903	0.0056	NT		211.628	217.160	16.93	17.368	0.246
AITR1392-ASU1-LC-A-MH1-RTD-4	5.505	0.5065	0.0900	0.0056	NT		221.010	225.949	NT		NT
AITR1392-ASU1-LC-A-MH2-RTD-1	5.502	0.5026	0.0877	0.0055	NT		181.164	180.478	17.18	17.110	0.278
AITR1392-ASU1-LC-A-MH2-RTD-2	5.503	0.5067	0.0876	0.0055	NT		192.554	191.606	16.65	16.565	0.311
AITR1392-ASU1-LC-A-MH2-RTD-3	5.504	0.5069	0.0874	0.0055	NT		197.714	196.366	17.71	17.592	0.366
AITR1392-ASU1-LC-A-MH2-RTD-4	5.505	0.5064	0.0896	0.0056	NT		210.117	213.938	NT		NT
AITR1392-ASU1-LC-B-MH1-RTD-1	5.505	0.5077	0.0916	0.0057	NT		195.384	203.451	16.06	16.724	0.226
AITR1392-ASU1-LC-B-MH1-RTD-2	5.505	0.5088	0.0897	0.0056	NT		217.032	221.184	16.59	16.910	0.350
AITR1392-ASU1-LC-B-MH1-RTD-3	5.506	0.5080	0.0891	0.0056	NT		195.471	197.840	16.86	17.063	0.377
AITR1392-ASU1-LC-B-MH1-RTD-4	5.506	0.5084	0.0904	0.0057	NT		216.804	222.716	NT		NT
AITR1392-ASU1-LC-B-MH2-RTD-1	5.505	0.5068	0.0907	0.0057	NT		203.343	209.466	16.43	16.921	0.330
AITR1392-ASU1-LC-B-MH2-RTD-2	5.507	0.5078	0.0914	0.0057	NT		205.908	213.902	16.32	16.949	0.356
AITR1392-ASU1-LC-B-MH2-RTD-3	5.507	0.5073	0.0863	0.0054	NT		193.321	189.623	17.67	17.334	0.285
AITR1392-ASU1-LC-B-MH2-RTD-4	5.506	0.5081	0.0890	0.0056	NT		211.947	214.316	NT		NT
AITR1392-ASU1-LC-C-MH1-RTD-1	5.504	0.5065	0.0880	0.0055	NT		216.130	216.048	17.75	17.747	0.256
AITR1392-ASU1-LC-C-MH1-RTD-2	5.503	0.5072	0.0854	0.0053	NT		193.965	188.161	17.49	16.968	0.297
AITR1392-ASU1-LC-C-MH1-RTD-3	5.503	0.5070	0.0894	0.0056	NT		204.911	208.248	18.59	18.894	0.343
AITR1392-ASU1-LC-C-MH1-RTD-4	5.503	0.5069	0.0856	0.0053	NT		190.817	185.541	NT		NT
AITR1392-ASU1-LC-C-MH2-RTD-1	5.503	0.5076	0.0872	0.0055	NT		205.577	203.786	17.63	17.478	0.362
AITR1392-ASU1-LC-C-MH2-RTD-2	5.504	0.5075	0.0858	0.0054	NT		201.729	196.686	16.71	16.295	0.314
AITR1392-ASU1-LC-C-MH2-RTD-3	5.504	0.5078	0.0876	0.0055	NT		208.416	207.469	17.28	17.196	0.333
AITR1392-ASU1-LC-C-MH2-RTD-4	5.501	0.5075	0.0776	0.0049	NT		191.287	168.681	NT		NT
Minimum	5.5005	0.5013	0.0769	0.0048			181.164	168.681	16.061	14.391	0.2170
Maximum	5.5075	0.5088	0.0916	0.0057			221.010	225.949	18.591	18.894	0.3800
Average	5.5046	0.5069	0.0876	0.0055			203.533	202.797	17.058	17.024	0.3126
Standard Deviation	0.0017	0.0017	0.0037	0.0002			10.220	14.937	0.650	0.861	0.0517
Coefficient of Variation (%)	0.03	0.33	4.17	4.17			5.02	7.37	3.81	5.06	16.53
No. Specimens	24	24	24	24			24	24	18	18	18

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	Orientation			
	AITR	1392	ASU1	LC	MH	ETW	[0]16			

Test Group: AITR1392-ASU1-LC-MH-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%

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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-A-MH1-ETW-1	5.507	0.5098	0.0897	0.0056	NT		115.000	117.178	16.66	16.973	0.264
AITR1392-ASU1-LC-A-MH1-ETW-2	5.506	0.5098	0.0887	0.0055	NT		126.722	127.682	17.80	17.934	0.309
AITR1392-ASU1-LC-A-MH1-ETW-3	5.505	0.5095	0.0900	0.0056	NT		148.572	151.948	17.96	18.368	0.302
AITR1392-ASU1-LC-A-MH1-ETW-4	5.498	0.5097	0.0896	0.0056	NT		132.750	135.164	NT		NT
AITR1392-ASU1-LC-A-MH2-ETW-1	5.504	0.5073	0.0873	0.0055	NT		123.349	122.415	NT		NT
AITR1392-ASU1-LC-A-MH2-ETW-2	5.502	0.5072	0.0890	0.0056	NT		148.763	150.398	16.53	16.712	0.277
AITR1392-ASU1-LC-A-MH2-ETW-3	5.504	0.5073	0.0887	0.0055	NT		139.213	140.268	GE		0.432
AITR1392-ASU1-LC-A-MH2-ETW-4	5.502	0.5067	0.0884	0.0055	NT		167.886	168.649	17.25	17.332	0.279
AITR1392-ASU1-LC-B-MH1-ETW-1	5.507	0.5080	0.0889	0.0056	NT		136.718	138.117	NT		NT
AITR1392-ASU1-LC-B-MH1-ETW-2	5.506	0.5081	0.0888	0.0056	NT		144.467	145.780	NT		NT
AITR1392-ASU1-LC-B-MH1-ETW-3	5.506	0.5082	0.0883	0.0055	NT		139.477	140.006	17.63	17.693	0.388
AITR1392-ASU1-LC-B-MH1-ETW-4	5.504	0.5082	0.0912	0.0057	NT		129.322	134.073	16.81	17.432	0.368
AITR1392-ASU1-LC-B-MH2-ETW-1	5.510	0.5078	0.0877	0.0055	NT		122.161	121.790	NT		NT
AITR1392-ASU1-LC-B-MH2-ETW-2	5.509	0.5086	0.0883	0.0055	NT		132.814	133.216	17.56	17.614	0.311
AITR1392-ASU1-LC-B-MH2-ETW-3	5.509	0.5089	0.0885	0.0055	NT		137.063	137.842	16.93	17.025	0.338
AITR1392-ASU1-LC-B-MH2-ETW-4	5.508	0.5076	0.0884	0.0055	NT		136.734	137.355	18.16	18.238	0.330
AITR1392-ASU1-LC-C-MH1-ETW-1	5.504	0.5074	0.0841	0.0053	NT		140.798	134.611	NT		NT
AITR1392-ASU1-LC-C-MH1-ETW-2	5.503	0.5077	0.0855	0.0053	NT		127.904	124.319	17.28	16.795	0.321
AITR1392-ASU1-LC-C-MH1-ETW-3	5.502	0.5081	0.0853	0.0053	NT		135.544	131.334	17.09	16.560	0.287
AITR1392-ASU1-LC-C-MH1-ETW-4	5.504	0.5078	0.0816	0.0051	NT		131.336	121.834	15.67	14.537	0.344
AITR1392-ASU1-LC-C-MH2-ETW-1	5.499	0.5076	0.0868	0.0054	NT		149.391	147.297	18.34	18.084	0.296
AITR1392-ASU1-LC-C-MH2-ETW-2	5.503	0.5082	0.0865	0.0054	NT		129.787	127.575	17.38	17.087	0.324
AITR1392-ASU1-LC-C-MH2-ETW-3	5.501	0.5078	0.0862	0.0054	NT		138.228	135.348	17.42	17.056	0.295
AITR1392-ASU1-LC-C-MH2-ETW-4	5.502	0.5083	0.0869	0.0054	NT		135.108	133.419	17.78	17.561	0.351
Minimum	5.4977	0.5067	0.0816	0.0051			115.000	117.178	15.671	14.537	0.2640
Maximum	5.5099	0.5098	0.0912	0.0057			167.886	168.649	18.341	18.368	0.4320
Average	5.5044	0.5082	0.0877	0.0055			136.213	135.734	17.309	17.235	0.3231
Standard Deviation	0.0031	0.0008	0.0021	0.0001			10.857	11.523	0.662	0.879	0.0425
Coefficient of Variation (%)	0.06	0.17	2.37	2.37			7.97	8.49	3.82	5.10	13.16
No. Specimens	24	24	24	24			24	24	17	17	18

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	Orientation			
	AITR	1392	ASU1	LC	MH	ETW2	[0]16			

Test Group: AITR1392-ASU1-LC-MH-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%

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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-A-MH1-ETW2-1	5.505	0.5096	0.0915	0.0057	NT		119.684	124.489	GE		GE
AITR1392-ASU1-LC-A-MH1-ETW2-2	5.507	0.5100	0.0885	0.0055	NT		131.112	131.807	19.12	19.218	0.362
AITR1392-ASU1-LC-A-MH1-ETW2-3	5.506	0.5101	0.0883	0.0055	NT		137.771	138.240	19.66	19.723	0.399
AITR1392-ASU1-LC-A-MH1-ETW2-4	5.506	0.5106	0.0870	0.0054	NT		158.808	157.003	GE		GE
AITR1392-ASU1-LC-A-MH2-ETW2-1	5.505	0.5068	0.0877	0.0055	NT		139.404	138.876	GE		GE
AITR1392-ASU1-LC-A-MH2-ETW2-2	5.505	0.5072	0.0881	0.0055	NT		123.181	123.321	GE		GE
AITR1392-ASU1-LC-A-MH2-ETW2-3	5.503	0.5074	0.0880	0.0055	NT		145.200	145.200	GE		GE
AITR1392-ASU1-LC-A-MH2-ETW2-4	5.503	0.5076	0.0878	0.0055	NT		145.711	145.325	GE		GE
AITR1392-ASU1-LC-B-MH1-ETW2-1	5.505	0.5079	0.0900	0.0056	NT		141.250	144.514	GE		GE
AITR1392-ASU1-LC-B-MH1-ETW2-2	5.502	0.5083	0.0905	0.0057	NT		145.925	150.015	GE		GE
AITR1392-ASU1-LC-B-MH1-ETW2-3	5.505	0.5080	0.0888	0.0055	NT		145.629	146.898	19.40	19.564	0.325
AITR1392-ASU1-LC-B-MH1-ETW2-4	5.501	0.5076	0.0935	0.0058	NT		120.460	127.943	GE		GE
AITR1392-ASU1-LC-B-MH2-ETW2-1	5.508	0.5076	0.0894	0.0056	NT		130.527	132.604	20.32	20.645	0.352
AITR1392-ASU1-LC-B-MH2-ETW2-2	5.508	0.5071	0.0894	0.0056	NT		130.199	132.320	20.45	20.779	0.365
AITR1392-ASU1-LC-B-MH2-ETW2-3	5.509	0.5080	0.0902	0.0056	NT		124.362	127.518	GE		GE
AITR1392-ASU1-LC-B-MH2-ETW2-4	5.508	0.5074	0.0887	0.0055	NT		141.281	142.351	GE		GE
AITR1392-ASU1-LC-C-MH1-ETW2-1	5.502	0.5078	0.0846	0.0053	NT		113.930	109.485	GE		GE
AITR1392-ASU1-LC-C-MH1-ETW2-2	5.501	0.5069	0.0881	0.0055	NT		131.586	131.686	GE		GE
AITR1392-ASU1-LC-C-MH1-ETW2-3	5.500	0.5077	0.0871	0.0054	NT		155.061	153.475	GE		GE
AITR1392-ASU1-LC-C-MH1-ETW2-4	5.501	0.5067	0.0855	0.0053	NT		140.172	136.243	GE		GE
AITR1392-ASU1-LC-C-MH2-ETW2-1	5.504	0.5084	0.0860	0.0054	NT		175.600	171.609	GE		GE
AITR1392-ASU1-LC-C-MH2-ETW2-2	5.503	0.5080	0.0858	0.0054	NT		139.678	136.133	GE		GE
AITR1392-ASU1-LC-C-MH2-ETW2-3	5.503	0.5078	0.0786	0.0049	NT		139.132	124.217	19.96	17.822	0.302
AITR1392-ASU1-LC-C-MH2-ETW2-4	5.497	0.5088	0.0858	0.0054	NT		147.426	143.684	GE		GE
Minimum	5.4970	0.5067	0.0786	0.0049			113.930	109.485	19.117	17.822	0.3020
Maximum	5.5086	0.5106	0.0935	0.0058			175.600	171.609	20.446	20.779	0.3990
Average	5.5041	0.5081	0.0879	0.0055			138.462	138.123	19.816	19.625	0.3508
Standard Deviation	0.0030	0.0011	0.0028	0.0002			13.704	13.041	0.523	1.077	0.0338
Coefficient of Variation (%)	0.05	0.21	3.23	3.23			9.90	9.44	2.64	5.49	9.62
No. Specimens	24	24	24	24			24	24	6	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	Orientation			
	AITR	1392	ASU1	TT	MH	CTD	[90]16			

Test Group: AITR1392-ASU1-TT-MH-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.
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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-ASU1-TT-A-MH1-CTD-1	10.043	1.0073	0.0866	0.0054	NT				NT		NT
AITR1392-ASU1-TT-A-MH1-CTD-2	10.047	1.0061	0.0892	0.0056	756.00	LGB	8.421	8.539	1.23	1.251	NT
AITR1392-ASU1-TT-A-MH1-CTD-3	10.034	1.0077	0.0889	0.0056	599.00	LGM	6.689	6.755	1.27	1.281	NT
AITR1392-ASU1-TT-A-MH1-CTD-4	10.041	1.0070	0.0894	0.0056	586.00	LAB	6.509	6.613	1.25	1.269	NT
AITR1392-ASU1-TT-A-MH2-CTD-1	10.044	1.0053	0.0889	0.0056	631.00	LAT	7.060	7.132	1.21	1.222	NT
AITR1392-ASU1-TT-A-MH2-CTD-2	10.044	1.0061	0.0880	0.0055	611.00	LAT	6.898	6.901	1.26	1.260	NT
AITR1392-ASU1-TT-A-MH2-CTD-3	10.045	1.0062	0.0881	0.0055	708.00	LAB	7.987	7.996	1.25	1.246	NT
AITR1392-ASU1-TT-A-MH2-CTD-4	10.053	1.0068	0.0886	0.0055	NT				NT		NT
AITR1392-ASU1-TT-B-MH1-CTD-1	10.062	1.0078	0.0895	0.0056	556.00	LGT/LAT	6.166	6.269	1.30	1.323	NT
AITR1392-ASU1-TT-B-MH1-CTD-2	10.047	1.0076	0.0896	0.0056	560.00	LGM	6.201	6.316	1.25	1.273	NT
AITR1392-ASU1-TT-B-MH1-CTD-3	10.062	1.0077	0.0892	0.0056	498.00	LAT	5.542	5.616	1.13	1.147	NT
AITR1392-ASU1-TT-B-MH1-CTD-4	10.060	1.0080	0.0890	0.0056	NT				NT		NT
AITR1392-ASU1-TT-B-MH2-CTD-1	10.036	1.0087	0.0899	0.0056	530.00	LGM	5.843	5.971	1.17	1.198	NT
AITR1392-ASU1-TT-B-MH2-CTD-2	10.037	1.0083	0.0890	0.0056	563.00	LAT	6.274	6.345	GE		NT
AITR1392-ASU1-TT-B-MH2-CTD-3	10.037	1.0076	0.0902	0.0056	571.00	LGM	6.280	6.440	1.09	1.113	NT
AITR1392-ASU1-TT-B-MH2-CTD-4	10.060	1.0078	0.0900	0.0056	NT				NT		NT
AITR1392-ASU1-TT-C-MH1-CTD-1	10.084	1.0081	0.0849	0.0053	656.00	LGM	7.665	7.395	1.21	1.165	NT
AITR1392-ASU1-TT-C-MH1-CTD-2	10.092	1.0090	0.0852	0.0053	758.00	LWT	8.817	8.537	1.54	1.492	NT
AITR1392-ASU1-TT-C-MH1-CTD-3	10.066	1.0092	0.0851	0.0053	768.00	LWB	8.943	8.648	1.08	1.042	NT
AITR1392-ASU1-TT-C-MH1-CTD-4	10.083	1.0084	0.0851	0.0053	NT				NT		NT
AITR1392-ASU1-TT-C-MH2-CTD-1	10.079	1.0086	0.0867	0.0054	FM	LIT			GE		NT
AITR1392-ASU1-TT-C-MH2-CTD-2	10.069	1.0084	0.0858	0.0054	675.00	LAB	7.799	7.607	1.13	1.099	NT
AITR1392-ASU1-TT-C-MH2-CTD-3	10.088	1.0090	0.0850	0.0053	700.00	LAT	8.158	7.883	1.42	1.374	NT
AITR1392-ASU1-TT-C-MH2-CTD-4	10.065	1.0085	0.0856	0.0054	566.00	LAT	6.554	6.377	1.53	1.486	NT
Minimum	10.0336	1.0053	0.0849	0.0053	498.00		5.542	5.616	1.078	1.042	
Maximum	10.0918	1.0092	0.0902	0.0056	768.00		8.943	8.648	1.541	1.492	
Average	10.0574	1.0077	0.0878	0.0055	627.33		7.100	7.074	1.254	1.250	
Standard Deviation	0.0178	0.0010	0.0019	0.0001	83.31		1.049	0.939	0.134	0.123	
Coefficient of Variation (%)	0.18	0.10	2.16	2.16	13.28		14.77	13.27	10.73	9.86	
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	Orientation			
	AITR	1392	ASU1	TT	MH	RTD	[90]16			

Test Group: AITR1392-ASU1-TT-MH-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%

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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-ASU1-TT-A-MH1-RTD-1	10.037	1.0062	0.0881	0.0055	618.00	LWB	6.969	6.980	1.15	1.150	NT
AITR1392-ASU1-TT-A-MH1-RTD-2	10.037	1.0079	0.0884	0.0055	600.00	LGM	6.731	6.765	1.15	1.159	NT
AITR1392-ASU1-TT-A-MH1-RTD-3	10.018	1.0077	0.0890	0.0056	528.00	LGM	5.890	5.954	1.13	1.144	NT
AITR1392-ASU1-TT-A-MH1-RTD-4	10.035	1.0078	0.0871	0.0054	NT				NT		NT
AITR1392-ASU1-TT-A-MH2-RTD-1	10.042	1.0071	0.0879	0.0055	660.00	LWT	7.456	7.447	1.12	1.123	NT
AITR1392-ASU1-TT-A-MH2-RTD-2	10.053	1.0076	0.0857	0.0054	537.00	LAT	6.221	6.056	1.15	1.116	NT
AITR1392-ASU1-TT-A-MH2-RTD-3	10.051	1.0066	0.0885	0.0055	717.00	LAB	8.052	8.095	1.10	1.108	NT
AITR1392-ASU1-TT-A-MH2-RTD-4	10.043	1.0060	0.0883	0.0055	NT				NT		NT
AITR1392-ASU1-TT-B-MH1-RTD-1	10.060	1.0079	0.0894	0.0056	534.00	LGM	5.926	6.020	1.13	1.149	NT
AITR1392-ASU1-TT-B-MH1-RTD-2	10.061	1.0080	0.0905	0.0057	568.00	LGM	6.229	6.404	1.13	1.161	NT
AITR1392-ASU1-TT-B-MH1-RTD-3	10.049	1.0078	0.0893	0.0056	530.00	LGM	5.891	5.976	1.15	1.170	NT
AITR1392-ASU1-TT-B-MH1-RTD-4	10.057	1.0083	0.0894	0.0056	NT				NT		NT
AITR1392-ASU1-TT-B-MH2-RTD-1	10.054	1.0079	0.0907	0.0057	518.00	LGM	5.664	5.840	1.10	1.133	NT
AITR1392-ASU1-TT-B-MH2-RTD-2	10.069	1.0082	0.0906	0.0057	514.00	LAT	5.629	5.794	1.13	1.160	NT
AITR1392-ASU1-TT-B-MH2-RTD-3	10.056	1.0087	0.0894	0.0056	519.00	LWB	5.753	5.847	1.12	1.141	NT
AITR1392-ASU1-TT-B-MH2-RTD-4	10.052	1.0083	0.0902	0.0056	NT				NT		NT
AITR1392-ASU1-TT-C-MH1-RTD-1	10.080	1.0084	0.0856	0.0053	850.00	LWT	9.851	9.579	1.20	1.171	NT
AITR1392-ASU1-TT-C-MH1-RTD-2	10.072	1.0078	0.0853	0.0053	750.00	LGM	8.724	8.456	1.22	1.186	NT
AITR1392-ASU1-TT-C-MH1-RTD-3	10.092	1.0081	0.0846	0.0053	724.00	LWB	8.486	8.161	1.20	1.157	NT
AITR1392-ASU1-TT-C-MH1-RTD-4	10.073	1.0079	0.0852	0.0053	NT				NT		NT
AITR1392-ASU1-TT-C-MH2-RTD-1	10.083	1.0091	0.0857	0.0054	637.00	LGM	7.369	7.173	1.17	1.143	NT
AITR1392-ASU1-TT-C-MH2-RTD-2	10.087	1.0085	0.0866	0.0054	601.00	LWT	6.884	6.772	1.19	1.167	NT
AITR1392-ASU1-TT-C-MH2-RTD-3	10.079	1.0087	0.0860	0.0054	587.00	LWT	6.767	6.613	1.17	1.140	NT
AITR1392-ASU1-TT-C-MH2-RTD-4	10.081	1.0093	0.0860	0.0054	NT				NT		NT
Minimum	10.0175	1.0060	0.0846	0.0053	514.00		5.629	5.794	1.099	1.108	
Maximum	10.0915	1.0093	0.0907	0.0057	850.00		9.851	9.579	1.224	1.186	
Average	10.0593	1.0079	0.0878	0.0055	610.67		6.916	6.885	1.151	1.149	
Standard Deviation	0.0190	0.0008	0.0019	0.0001	96.28		1.208	1.086	0.035	0.020	
Coefficient of Variation (%)	0.19	0.08	2.22	2.22	15.77		17.47	15.77	3.08	1.76	
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	Orientation			
	AITR	1392	ASU1	TT	MH	ETW	[90]16			

Test Group: AITR1392-ASU1-TT-MH-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%

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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-A-MH1-ETW-1	10.041	1.0087	0.0895	0.0056	347.00	LWB	3.842	3.909	0.95	0.965	NT
AITR1392-ASU1-TT-A-MH1-ETW-2	10.054	1.0090	0.0890	0.0056	358.00	LGM	3.988	4.032	0.96	0.969	NT
AITR1392-ASU1-TT-A-MH1-ETW-3	10.054	1.0092	0.0888	0.0056	381.00	LWB	4.250	4.290	GE		NT
AITR1392-ASU1-TT-A-MH1-ETW-4	10.049	1.0096	0.0904	0.0056	369.00	LGT	4.045	4.153	0.98	1.008	NT
AITR1392-ASU1-TT-A-MH2-ETW-1	10.052	1.0074	0.0918	0.0057	388.00	LGM	4.197	4.377	0.95	0.993	NT
AITR1392-ASU1-TT-A-MH2-ETW-2	10.067	1.0081	0.0928	0.0058	360.00	LAB	3.847	4.058	0.92	0.975	NT
AITR1392-ASU1-TT-A-MH2-ETW-3	10.067	1.0078	0.0904	0.0057	389.00	LGM	4.268	4.386	0.96	0.991	NT
AITR1392-ASU1-TT-A-MH2-ETW-4	10.060	1.0085	0.0892	0.0056	NT				NT		NT
AITR1392-ASU1-TT-B-MH1-ETW-1	10.070	1.0090	0.0900	0.0056	299.00	LGM	3.291	3.368	1.22	1.250	NT
AITR1392-ASU1-TT-B-MH1-ETW-2	10.055	1.0089	0.0894	0.0056	346.00	LGM	3.835	3.897	0.97	0.988	NT
AITR1392-ASU1-TT-B-MH1-ETW-3	10.068	1.0091	0.0894	0.0056	324.00	LGT	3.593	3.648	1.09	1.111	NT
AITR1392-ASU1-TT-B-MH1-ETW-4	10.076	1.0096	0.0904	0.0057	318.00	LGM	3.483	3.579	0.89	0.916	NT
AITR1392-ASU1-TT-B-MH2-ETW-1	10.078	1.0086	0.0915	0.0057	341.00	LWT	3.696	3.842	0.96	1.001	NT
AITR1392-ASU1-TT-B-MH2-ETW-2	10.078	1.0086	0.0889	0.0056	340.00	LGM	3.792	3.831	0.96	0.969	NT
AITR1392-ASU1-TT-B-MH2-ETW-3	10.070	1.0081	0.0899	0.0056	342.00	LWT	3.772	3.855	0.97	0.988	NT
AITR1392-ASU1-TT-B-MH2-ETW-4	10.072	1.0089	0.0909	0.0057	NT				NT		NT
AITR1392-ASU1-TT-C-MH1-ETW-1	10.111	1.0099	0.0858	0.0054	394.00	LAT	4.547	4.434	1.05	1.021	NT
AITR1392-ASU1-TT-C-MH1-ETW-2	10.103	1.0093	0.0857	0.0054	410.00	LWB	4.738	4.616	1.01	0.982	NT
AITR1392-ASU1-TT-C-MH1-ETW-3	10.103	1.0097	0.0861	0.0054	394.00	LGM	4.534	4.434	1.02	0.999	NT
AITR1392-ASU1-TT-C-MH1-ETW-4	10.091	1.0095	0.0870	0.0054	NT				NT		NT
AITR1392-ASU1-TT-C-MH2-ETW-1	10.112	1.0095	0.0898	0.0056	346.00	LWT	3.815	3.895	0.97	0.991	NT
AITR1392-ASU1-TT-C-MH2-ETW-2	10.095	1.0088	0.0875	0.0055	388.00	LWT	4.394	4.371	1.02	1.011	NT
AITR1392-ASU1-TT-C-MH2-ETW-3	10.115	1.0097	0.0875	0.0055	305.00	LAB	3.453	3.432	0.98	0.976	NT
AITR1392-ASU1-TT-C-MH2-ETW-4	10.077	1.0100	0.0863	0.0054	376.00	LGM	4.314	4.230	1.00	0.981	NT
Minimum	10.0410	1.0074	0.0857	0.0054	299.00		3.291	3.368	0.891	0.916	
Maximum	10.1145	1.0100	0.0928	0.0058	410.00		4.738	4.616	1.222	1.250	
Average	10.0757	1.0090	0.0891	0.0056	357.86		3.985	4.030	0.992	1.004	
Standard Deviation	0.0214	0.0007	0.0019	0.0001	31.11		0.393	0.351	0.070	0.068	
Coefficient of Variation (%)	0.21	0.07	2.17	2.17	8.69		9.85	8.70	7.01	6.78	
No. Specimens	24	24	24	24	21		21	21	20	20	

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	Orientation			
	AITR	1392	ASU1	TT	MH	ETW2	[90]16			

Test Group: AITR1392-ASU1-TT-MH-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-A-MH1-ETW2-1	10.054	1.0079	0.0890	0.0056	305.00	LWT	3.399	3.439	0.94	0.952	NT
AITR1392-ASU1-TT-A-MH1-ETW2-2	10.047	1.0077	0.0892	0.0056	265.00	LWT	2.947	2.988	1.01	1.025	NT
AITR1392-ASU1-TT-A-MH1-ETW2-3	10.052	1.0079	0.0886	0.0055	289.00	LAT	3.237	3.258	GE		NT
AITR1392-ASU1-TT-A-MH1-ETW2-4	10.053	1.0071	0.0897	0.0056	NT				NT		NT
AITR1392-ASU1-TT-A-MH2-ETW2-1	10.063	1.0073	0.0925	0.0058	FM	LIT			1.08	1.136	NT
AITR1392-ASU1-TT-A-MH2-ETW2-2	10.046	1.0068	0.0912	0.0057	274.00	LAT	2.984	3.093	0.83	0.862	NT
AITR1392-ASU1-TT-A-MH2-ETW2-3	10.054	1.0066	0.0886	0.0055	257.00	LAT	2.883	2.901	0.86	0.865	NT
AITR1392-ASU1-TT-A-MH2-ETW2-4	10.054	1.0084	0.0896	0.0056	268.00	LWT	2.967	3.020	GE		NT
AITR1392-ASU1-TT-B-MH1-ETW2-1	10.069	1.0093	0.0903	0.0056	250.00	LGB	2.742	2.815	0.90	0.919	NT
AITR1392-ASU1-TT-B-MH1-ETW2-2	10.063	1.0091	0.0900	0.0056	294.00	LGB	3.236	3.311	0.92	0.936	NT
AITR1392-ASU1-TT-B-MH1-ETW2-3	10.075	1.0094	0.0899	0.0056	243.00	LWT	2.677	2.736	1.21	1.236	NT
AITR1392-ASU1-TT-B-MH1-ETW2-4	10.068	1.0091	0.0903	0.0056	NT				NT		NT
AITR1392-ASU1-TT-B-MH2-ETW2-1	10.057	1.0084	0.0915	0.0057	273.00	LGM	2.959	3.077	0.80	0.832	NT
AITR1392-ASU1-TT-B-MH2-ETW2-2	10.067	1.0087	0.0915	0.0057	259.00	LGM	2.807	2.918	GE		NT
AITR1392-ASU1-TT-B-MH2-ETW2-3	10.065	1.0087	0.0900	0.0056	301.00	LWT	3.317	3.391	0.92	0.941	NT
AITR1392-ASU1-TT-B-MH2-ETW2-4	10.066	1.0086	0.0903	0.0056	NT				NT		NT
AITR1392-ASU1-TT-C-MH1-ETW2-1	10.092	1.0100	0.0862	0.0054	352.00	LGM	4.043	3.960	GE		NT
AITR1392-ASU1-TT-C-MH1-ETW2-2	10.097	1.0096	0.0855	0.0053	348.00	LGT	4.030	3.917	0.96	0.928	NT
AITR1392-ASU1-TT-C-MH1-ETW2-3	10.068	1.0092	0.0859	0.0054	342.00	LWT	3.945	3.851	0.90	0.874	NT
AITR1392-ASU1-TT-C-MH1-ETW2-4	10.092	1.0081	0.0857	0.0054	NT				NT		NT
AITR1392-ASU1-TT-C-MH2-ETW2-1	10.096	1.0092	0.0869	0.0054	296.00	LWT	3.376	3.333	0.99	0.976	NT
AITR1392-ASU1-TT-C-MH2-ETW2-2	10.105	1.0090	0.0867	0.0054	312.00	LWT	3.565	3.514	0.90	0.890	NT
AITR1392-ASU1-TT-C-MH2-ETW2-3	10.104	1.0090	0.0870	0.0054	313.00	LWT	3.566	3.525	0.92	0.909	NT
AITR1392-ASU1-TT-C-MH2-ETW2-4	10.088	1.0086	0.0869	0.0054	NT				NT		NT
Minimum	10.0457	1.0066	0.0855	0.0053	243.00		2.677	2.736	0.800	0.832	
Maximum	10.1048	1.0100	0.0925	0.0058	352.00		4.043	3.960	1.209	1.236	
Average	10.0706	1.0085	0.0889	0.0056	291.17		3.260	3.280	0.942	0.952	
Standard Deviation	0.0185	0.0009	0.0020	0.0001	33.27		0.434	0.373	0.102	0.108	
Coefficient of Variation (%)	0.18	0.09	2.31	2.31	11.43		13.32	11.38	10.78	11.37	
No. Specimens	24	24	24	24	18		18	18	15	15	

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	Orientation			
	AITR	1392	ASU1	TC	MH	CTD	[90]16			

Test Group: AITR1392-ASU1-TC-MH-CTD

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

Test Type: Transverse Compression Condition: CTD

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-ASU1-TC-A-MH1-CTD-1	5.509	0.5056	0.0885	0.0055	1702.00	HGM	38.042	38.251	1.38	1.384	0.022
AITR1392-ASU1-TC-A-MH1-CTD-2	5.510	0.5089	0.0889	0.0056	1728.00	HGT	38.202	38.586	1.42	1.431	0.018
AITR1392-ASU1-TC-A-MH1-CTD-3	5.510	0.5085	0.0892	0.0056	1746.00	HGM	38.494	39.019	1.44	1.458	0.018
AITR1392-ASU1-TC-A-MH1-CTD-4	5.507	0.5068	0.0879	0.0055	NT				NT		NT
AITR1392-ASU1-TC-A-MH2-CTD-1	5.499	0.5067	0.0880	0.0055	1854.00	HGM	41.579	41.579	1.41	1.405	0.019
AITR1392-ASU1-TC-A-MH2-CTD-2	5.499	0.5050	0.0880	0.0055	1749.00	HGT/HGB	39.376	39.354	1.41	1.410	0.016
AITR1392-ASU1-TC-A-MH2-CTD-3	5.500	0.5063	0.0876	0.0055	1752.00	HGT	39.517	39.323	1.32	1.313	0.016
AITR1392-ASU1-TC-A-MH2-CTD-4	5.501	0.5066	0.0883	0.0055	NT				NT		NT
AITR1392-ASU1-TC-B-MH1-CTD-1	5.507	0.5090	0.0861	0.0054	1663.00	HGT	37.949	37.130	1.49	1.457	0.021
AITR1392-ASU1-TC-B-MH1-CTD-2	5.507	0.5088	0.0858	0.0054	1750.00	HGT	40.100	39.082	1.40	1.365	0.015
AITR1392-ASU1-TC-B-MH1-CTD-3	5.508	0.5090	0.0862	0.0054	1496.00	HGT/HGB	34.101	33.397	1.48	1.445	0.018
AITR1392-ASU1-TC-B-MH1-CTD-4	5.508	0.5069	0.0864	0.0054	NT				NT		NT
AITR1392-ASU1-TC-B-MH2-CTD-1	5.509	0.5081	0.0853	0.0053	1424.00	HGT/HIB	32.862	31.848	1.38	1.336	GE
AITR1392-ASU1-TC-B-MH2-CTD-2	5.509	0.5081	0.0889	0.0056	1831.00	HGM	40.541	40.948	1.48	1.498	0.019
AITR1392-ASU1-TC-B-MH2-CTD-3	5.510	0.5075	0.0892	0.0056	1880.00	HGT/HGB	41.553	42.096	1.43	1.444	0.014
AITR1392-ASU1-TC-B-MH2-CTD-4	5.510	0.5080	0.0892	0.0056	NT				NT		NT
AITR1392-ASU1-TC-C-MH1-CTD-1	5.501	0.5055	0.0841	0.0053	1524.00	HGB	35.836	34.262	1.45	1.383	0.016
AITR1392-ASU1-TC-C-MH1-CTD-2	5.507	0.5058	0.0844	0.0053	1709.00	HGM/HGT	40.017	38.396	1.46	1.399	0.017
AITR1392-ASU1-TC-C-MH1-CTD-3	5.509	0.5063	0.0844	0.0053	1607.00	HGM/HGT	37.609	36.071	1.43	1.370	0.023
AITR1392-ASU1-TC-C-MH1-CTD-4	5.510	0.5065	0.0855	0.0053	NT				NT		NT
AITR1392-ASU1-TC-C-MH2-CTD-1	5.505	0.5093	0.0859	0.0054	1705.00	HGT	38.960	38.045	1.36	1.325	0.018
AITR1392-ASU1-TC-C-MH2-CTD-2	5.504	0.5095	0.0872	0.0054	1683.00	HGB	37.893	37.534	1.36	1.346	0.020
AITR1392-ASU1-TC-C-MH2-CTD-3	5.504	0.5092	0.0855	0.0053	1638.00	HGT	37.609	36.555	1.48	1.441	0.021
AITR1392-ASU1-TC-C-MH2-CTD-4	5.504	0.5089	0.0840	0.0053	NT				NT		NT
Minimum	5.4993	0.5050	0.0840	0.0053	1424.00		32.862	31.848	1.319	1.313	0.0140
Maximum	5.5098	0.5095	0.0892	0.0056	1880.00		41.579	42.096	1.489	1.498	0.0230
Average	5.5062	0.5075	0.0869	0.0054	1691.17		38.347	37.860	1.419	1.401	0.0183
Standard Deviation	0.0036	0.0014	0.0017	0.0001	120.15		2.304	2.702	0.049	0.052	0.0025
Coefficient of Variation (%)	0.07	0.28	2.01	2.01	7.10		6.01	7.14	3.44	3.70	13.77
No. Specimens	24	24	24	24	18		18	18	18	18	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	Orientation			
	AITR	1392	ASU1	TC	MH	RTD	[90]16			

Test Group: AITR1392-ASU1-TC-MH-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%

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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-ASU1-TC-A-MH1-RTD-1	5.505	0.5076	0.0862	0.0054	1045.00	HAT	23.888	23.394	1.24	1.217	0.011
AITR1392-ASU1-TC-A-MH1-RTD-2	5.510	0.5080	0.0889	0.0056	1257.00	HAT	27.823	28.118	1.20	1.213	0.013
AITR1392-ASU1-TC-A-MH1-RTD-3	5.509	0.5076	0.0876	0.0055	1236.00	BGB	27.804	27.672	1.30	1.297	0.016
AITR1392-ASU1-TC-A-MH1-RTD-4	5.508	0.5072	0.0890	0.0056	NT				NT		NT
AITR1392-ASU1-TC-A-MH2-RTD-1	5.500	0.5067	0.0876	0.0055	1239.00	BGT	27.910	27.789	1.22	1.218	0.014
AITR1392-ASU1-TC-A-MH2-RTD-2	5.502	0.5073	0.0878	0.0055	1249.00	BGM	28.029	27.976	1.25	1.246	0.014
AITR1392-ASU1-TC-A-MH2-RTD-3	5.501	0.5075	0.0875	0.0055	1208.00	BGB	27.207	27.047	1.26	1.255	0.015
AITR1392-ASU1-TC-A-MH2-RTD-4	5.507	0.5071	0.0880	0.0055	NT				NT		NT
AITR1392-ASU1-TC-B-MH1-RTD-1	5.508	0.5089	0.0863	0.0054	1221.00	HGT	27.814	27.266	1.29	1.267	0.013
AITR1392-ASU1-TC-B-MH1-RTD-2	5.509	0.5087	0.0861	0.0054	1230.00	BGM	28.081	27.475	1.22	1.192	0.013
AITR1392-ASU1-TC-B-MH1-RTD-3	5.508	0.5083	0.0862	0.0054	1199.00	BAB	27.358	26.803	1.24	1.211	0.015
AITR1392-ASU1-TC-B-MH1-RTD-4	5.509	0.5079	0.0864	0.0054	NT				NT		NT
AITR1392-ASU1-TC-B-MH2-RTD-1	5.508	0.5062	0.0889	0.0056	1220.00	BGT	27.126	27.388	1.25	1.262	0.016
AITR1392-ASU1-TC-B-MH2-RTD-2	5.507	0.5059	0.0853	0.0053	1144.00	HGB	26.526	25.697	1.21	1.173	0.014
AITR1392-ASU1-TC-B-MH2-RTD-3	5.506	0.5091	0.0861	0.0054	1152.00	HGM	26.297	25.714	1.21	1.184	0.014
AITR1392-ASU1-TC-B-MH2-RTD-4	5.506	0.5018	0.0872	0.0055	NT				NT		NT
AITR1392-ASU1-TC-C-MH1-RTD-1	5.509	0.5059	0.0850	0.0053	NT				NT		NT
AITR1392-ASU1-TC-C-MH1-RTD-2	5.508	0.5054	0.0840	0.0052	1148.00	BGM	27.052	25.812	1.33	1.271	0.015
AITR1392-ASU1-TC-C-MH1-RTD-3	5.509	0.5063	0.0845	0.0053	1207.00	BGM	28.203	27.092	1.23	1.182	0.026
AITR1392-ASU1-TC-C-MH1-RTD-4	5.506	0.5058	0.0849	0.0053	1043.00	BGM	24.296	23.431	1.27	1.226	0.015
AITR1392-ASU1-TC-C-MH2-RTD-1	5.510	0.5097	0.0859	0.0054	1148.00	BGM	26.210	25.594	1.20	1.170	0.016
AITR1392-ASU1-TC-C-MH2-RTD-2	5.505	0.5082	0.0863	0.0054	1143.00	BGM	26.053	25.560	1.23	1.208	0.016
AITR1392-ASU1-TC-C-MH2-RTD-3	5.507	0.5093	0.0860	0.0054	1091.00	HGB	24.898	24.341	1.27	1.240	0.014
AITR1392-ASU1-TC-C-MH2-RTD-4	5.505	0.5093	0.0853	0.0053	NT				NT		NT
Minimum	5.5005	0.5018	0.0840	0.0052	1043.00		23.888	23.394	1.198	1.170	0.0110
Maximum	5.5096	0.5097	0.0890	0.0056	1257.00		28.203	28.118	1.332	1.297	0.0260
Average	5.5067	0.5073	0.0865	0.0054	1176.67		26.810	26.343	1.246	1.224	0.0150
Standard Deviation	0.0026	0.0017	0.0014	0.0001	66.50		1.321	1.488	0.037	0.037	0.0030
Coefficient of Variation (%)	0.05	0.34	1.61	1.61	5.65		4.93	5.65	2.95	3.01	20.32
No. Specimens	24	24	24	24	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	Orientation			
	AITR	1392	ASU1	TC	MH	ETW	[90]16			

Test Group: AITR1392-ASU1-TC-MH-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%

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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-ASU1-TC-A-MH1-ETW-1	5.519	0.5081	0.0887	0.0055	653.00	HGT	14.494	14.603	1.15	1.163	0.012
AITR1392-ASU1-TC-A-MH1-ETW-2	5.520	0.5073	0.0887	0.0055	665.00	HGM	14.780	14.897	1.20	1.209	0.013
AITR1392-ASU1-TC-A-MH1-ETW-3	5.520	0.5072	0.0895	0.0056	690.00	HGT	15.199	15.458	1.19	1.209	0.013
AITR1392-ASU1-TC-A-MH1-ETW-4	5.520	0.5074	0.0891	0.0056	652.00	HGT	14.423	14.603	1.12	1.130	0.012
AITR1392-ASU1-TC-A-MH2-ETW-1	5.516	0.5062	0.0882	0.0055	NT				NT		NT
AITR1392-ASU1-TC-A-MH2-ETW-2	5.517	0.5075	0.0883	0.0055	NT				NT		NT
AITR1392-ASU1-TC-A-MH2-ETW-3	5.516	0.5069	0.0889	0.0056	669.00	HGT	14.850	14.997	1.18	1.188	0.010
AITR1392-ASU1-TC-A-MH2-ETW-4	5.516	0.5064	0.0872	0.0054	657.00	HGT	14.884	14.743	1.19	1.180	0.011
AITR1392-ASU1-TC-B-MH1-ETW-1	5.518	0.5076	0.0875	0.0055	678.00	HGT	15.264	15.177	1.20	1.189	0.017
AITR1392-ASU1-TC-B-MH1-ETW-2	5.518	0.5078	0.0872	0.0055	688.00	HGT	15.538	15.397	1.25	1.239	0.012
AITR1392-ASU1-TC-B-MH1-ETW-3	5.515	0.5082	0.0876	0.0055	689.00	HGM	15.476	15.405	1.11	1.104	0.015
AITR1392-ASU1-TC-B-MH1-ETW-4	5.517	0.5078	0.0866	0.0054	670.00	HGM	15.235	14.992	1.14	1.119	0.010
AITR1392-ASU1-TC-B-MH2-ETW-1	5.518	0.5064	0.0876	0.0055	652.00	HGM	14.693	14.632	1.16	1.150	0.014
AITR1392-ASU1-TC-B-MH2-ETW-2	5.518	0.5068	0.0874	0.0055	630.00	HGB	14.222	14.125	1.12	1.111	0.015
AITR1392-ASU1-TC-B-MH2-ETW-3	5.519	0.5071	0.0902	0.0056	651.00	HGT	14.232	14.587	1.17	1.200	0.020
AITR1392-ASU1-TC-B-MH2-ETW-4	5.519	0.5061	0.0865	0.0054	588.00	HGT	13.438	13.203	1.17	1.151	0.015
AITR1392-ASU1-TC-C-MH1-ETW-1	5.514	0.5053	0.0841	0.0053	678.00	HGM	15.961	15.247	1.24	1.181	0.014
AITR1392-ASU1-TC-C-MH1-ETW-2	5.515	0.5051	0.0864	0.0054	690.00	BGM	15.806	15.525	1.19	1.167	0.013
AITR1392-ASU1-TC-C-MH1-ETW-3	5.514	0.5050	0.0855	0.0053	658.00	HGM	15.246	14.807	1.28	1.243	0.017
AITR1392-ASU1-TC-C-MH1-ETW-4	5.515	0.5049	0.0851	0.0053	665.00	HGM	15.471	14.967	1.21	1.174	0.012
AITR1392-ASU1-TC-C-MH2-ETW-1					NT				NT		NT
AITR1392-ASU1-TC-C-MH2-ETW-2					NT				NT		NT
AITR1392-ASU1-TC-C-MH2-ETW-3					NT				NT		NT
AITR1392-ASU1-TC-C-MH2-ETW-4					NT				NT		NT
Minimum	5.5139	0.5049	0.0841	0.0053	588.00		13.438	13.203	1.109	1.104	0.0100
Maximum	5.5200	0.5082	0.0902	0.0056	690.00		15.961	15.525	1.280	1.243	0.0200
Average	5.5171	0.5068	0.0875	0.0055	662.39		14.956	14.854	1.181	1.173	0.0136
Standard Deviation	0.0019	0.0011	0.0015	0.0001	24.92		0.637	0.555	0.046	0.040	0.0026
Coefficient of Variation (%)	0.04	0.21	1.75	1.75	3.76		4.26	3.74	3.91	3.44	19.05
No. Specimens	20	20	20	20	18		18	18	18	18	18

Notes:

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

A-MH2-1&2, C-MH2 DAMAGED IN BLOCKS BEFORE TEST

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition	Orientation			
	AITR	1392	ASU1	TC	MH	ETW2	[90]16			

Test Group: AITR1392-ASU1-TC-MH-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-A-MH1-ETW2-1	5.514	0.5072	0.0881	0.0055	525.00	HGT	11.754	11.763	GE		GE
AITR1392-ASU1-TC-A-MH1-ETW2-2	5.518	0.5075	0.0886	0.0055	566.00	HGM	12.592	12.673	GE		GE
AITR1392-ASU1-TC-A-MH1-ETW2-3	5.518	0.5073	0.0887	0.0055	559.00	HGM	12.428	12.522	1.29	1.303	0.033
AITR1392-ASU1-TC-A-MH1-ETW2-4	5.519	0.5073	0.0884	0.0055	578.00	HGM	12.884	12.947	GE		0.051
AITR1392-ASU1-TC-A-MH2-ETW2-1	5.517	0.5051	0.0886	0.0055	536.00	HGM	11.972	12.058	GE		0.056
AITR1392-ASU1-TC-A-MH2-ETW2-2	5.517	0.5065	0.0891	0.0056	574.00	HGT	12.713	12.877	1.41	1.430	0.036
AITR1392-ASU1-TC-A-MH2-ETW2-3	5.516	0.5079	0.0892	0.0056	579.00	HGM	12.784	12.954	GE		0.050
AITR1392-ASU1-TC-A-MH2-ETW2-4	5.518	0.5063	0.0896	0.0056	582.00	HGM	12.825	13.064	1.11	1.130	0.012
AITR1392-ASU1-TC-B-MH1-ETW2-1	5.516	0.5080	0.0872	0.0055	563.00	HGM	12.705	12.595	GE		0.039
AITR1392-ASU1-TC-B-MH1-ETW2-2	5.517	0.5075	0.0871	0.0054	550.00	HGM	12.446	12.314	GE		0.087
AITR1392-ASU1-TC-B-MH1-ETW2-3	5.518	0.5072	0.0868	0.0054	541.00	HGM	12.283	12.120	GE		0.049
AITR1392-ASU1-TC-B-MH1-ETW2-4	5.517	0.5048	0.0872	0.0054	562.00	HGM	12.772	12.651	1.40	1.384	0.033
AITR1392-ASU1-TC-B-MH2-ETW2-1	5.519	0.5079	0.0894	0.0056	515.00	LGT	11.339	11.523	GE		0.090
AITR1392-ASU1-TC-B-MH2-ETW2-2	5.519	0.5075	0.0861	0.0054	528.00	HGM	12.080	11.823	GE		0.045
AITR1392-ASU1-TC-B-MH2-ETW2-3	5.519	0.5070	0.0856	0.0053	503.00	HGM	11.595	11.275	GE		GE
AITR1392-ASU1-TC-B-MH2-ETW2-4	5.518	0.5068	0.0906	0.0057	571.00	HGM	12.437	12.804	1.12	1.151	0.015
AITR1392-ASU1-TC-C-MH1-ETW2-1	5.516	0.5068	0.0851	0.0053	563.00	HGM	13.054	12.624	GE		0.041
AITR1392-ASU1-TC-C-MH1-ETW2-2	5.516	0.5058	0.0845	0.0053	554.00	HGM	12.956	12.446	GE		GE
AITR1392-ASU1-TC-C-MH1-ETW2-3	5.514	0.5053	0.0855	0.0053	515.00	HGM	11.915	11.581	GE		0.090
AITR1392-ASU1-TC-C-MH1-ETW2-4	5.516	0.5056	0.0843	0.0053	544.00	HGM	12.758	12.227	1.09	1.047	0.015
AITR1392-ASU1-TC-C-MH2-ETW2-1	5.517	0.5086	0.0870	0.0054	540.00	HGT	12.208	12.064	GE		0.101
AITR1392-ASU1-TC-C-MH2-ETW2-2	5.516	0.5085	0.0872	0.0055	501.00	HGM	11.294	11.195	GE		GE
AITR1392-ASU1-TC-C-MH2-ETW2-3	5.516	0.5065	0.0850	0.0053	498.00	HGM	11.571	11.172	GE		0.138
AITR1392-ASU1-TC-C-MH2-ETW2-4	5.517	0.5082	0.0877	0.0055	530.00	HGM	11.892	11.851	1.45	1.441	0.050
Minimum	5.5138	0.5048	0.0843	0.0053	498.00		11.294	11.172	1.093	1.047	0.0120
Maximum	5.5193	0.5086	0.0906	0.0057	582.00		13.054	13.064	1.446	1.441	0.1380
Average	5.5170	0.5070	0.0874	0.0055	544.88		12.302	12.213	1.267	1.269	0.0543
Standard Deviation	0.0015	0.0011	0.0017	0.0001	26.01		0.532	0.586	0.157	0.159	0.0329
Coefficient of Variation (%)	0.03	0.21	1.99	1.99	4.77		4.32	4.80	12.40	12.55	60.66
No. Specimens	24	24	24	24	24		24	24	7	7	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	Orientation			
	AITR	1392	ASU1	UNT0	MH	CTD	[0, 90]4S			

Test Group: AITR1392-ASU1-UNT0-MH-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.
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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-ASU1-UNT0-A-MH1-CTD-1	10.092	1.0030	0.0882	0.0055	11720.00	LAT	132.432	132.783	9.76	9.790	NT
AITR1392-ASU1-UNT0-A-MH1-CTD-2	10.092	1.0027	0.0894	0.0056	12311.00	LAT	137.392	139.526	10.26	10.414	NT
AITR1392-ASU1-UNT0-A-MH1-CTD-3	10.096	1.0026	0.0899	0.0056	12476.00	LAT	138.361	141.400	10.50	10.728	NT
AITR1392-ASU1-UNT0-A-MH1-CTD-4	10.096	1.0029	0.0878	0.0055	12914.00	LAT	146.715	146.326	9.19	9.170	NT
AITR1392-ASU1-UNT0-A-MH2-CTD-1	10.040	1.0069	0.0905	0.0057	13971.00	LAT	153.256	157.668	10.89	11.202	NT
AITR1392-ASU1-UNT0-A-MH2-CTD-2	10.039	1.0065	0.0908	0.0057	11056.00	LAT	120.980	124.829	9.98	10.300	NT
AITR1392-ASU1-UNT0-A-MH2-CTD-3	10.035	1.0069	0.0887	0.0055	12048.00	LAT	134.852	135.975	10.09	10.172	NT
AITR1392-ASU1-UNT0-A-MH2-CTD-4	10.039	1.0068	0.0889	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH1-CTD-1	10.037	1.0057	0.0909	0.0057	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH1-CTD-2	10.037	1.0062	0.0906	0.0057	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH1-CTD-3	10.034	1.0051	0.0905	0.0057	12124.00	LAT	133.341	137.078	9.53	9.800	NT
AITR1392-ASU1-UNT0-B-MH1-CTD-4	10.035	1.0057	0.0891	0.0056	12185.00	LAT	136.037	137.686	9.37	9.482	NT
AITR1392-ASU1-UNT0-B-MH2-CTD-1	10.057	1.0067	0.0890	0.0056	13610.00	DGM/LAT	151.909	153.635	10.72	10.845	NT
AITR1392-ASU1-UNT0-B-MH2-CTD-2	10.057	1.0069	0.0906	0.0057	12313.00	LAT	134.969	138.957	9.48	9.764	NT
AITR1392-ASU1-UNT0-B-MH2-CTD-3	10.051	1.0070	0.0874	0.0055	13284.00	LAB	150.987	149.900	10.83	10.749	NT
AITR1392-ASU1-UNT0-B-MH2-CTD-4	10.058	1.0069	0.0862	0.0054	13055.00	LAT	150.349	147.331	9.57	9.382	NT
AITR1392-ASU1-UNT0-C-MH1-CTD-1	10.063	1.0084	0.0879	0.0055	13280.00	LAT	149.827	149.657	9.83	9.814	NT
AITR1392-ASU1-UNT0-C-MH1-CTD-2	10.065	1.0086	0.0882	0.0055	12376.00	LAT	139.121	139.437	9.72	9.742	NT
AITR1392-ASU1-UNT0-C-MH1-CTD-3	10.062	1.0082	0.0878	0.0055	11761.00	LAT	132.909	132.556	10.41	10.377	NT
AITR1392-ASU1-UNT0-C-MH1-CTD-4	10.071	1.0086	0.0881	0.0055	13443.00	LGM/DGT	151.230	151.459	9.48	9.491	NT
AITR1392-ASU1-UNT0-C-MH2-CTD-1	10.068	1.0085	0.0850	0.0053	13242.00	LAT/LAB	154.420	149.214	GE		NT
AITR1392-ASU1-UNT0-C-MH2-CTD-2	10.068	1.0082	0.0874	0.0055	11886.00	LAT	134.838	133.970	10.14	10.073	NT
AITR1392-ASU1-UNT0-C-MH2-CTD-3	10.068	1.0083	0.0885	0.0055	11658.00	LAT	130.640	131.382	9.91	9.970	NT
AITR1392-ASU1-UNT0-C-MH2-CTD-4	10.074	1.0082	0.0868	0.0054	12315.00	LAT	140.675	138.810	10.34	10.203	NT
Minimum	10.0335	1.0026	0.0850	0.0053	11056.00		120.980	124.829	9.194	9.170	
Maximum	10.0960	1.0086	0.0909	0.0057	13971.00		154.420	157.668	10.889	11.202	
Average	10.0596	1.0065	0.0887	0.0055	12525.14		140.726	141.409	10.000	10.073	
Standard Deviation	0.0204	0.0020	0.0015	0.0001	755.52		9.263	8.488	0.501	0.536	
Coefficient of Variation (%)	0.20	0.19	1.74	1.74	6.03		6.58	6.00	5.01	5.32	
No. Specimens	24	24	24	24	21		21	21	20	20	

Notes:

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

TEST #'S 3581-3590 WERE TESTED WITH POSSIBLE MISALIGNMENT

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition	Orientation			
	AITR	1392	ASU1	UNT0	MH	RTD	[0, 90]4S			

Test Group: AITR1392-ASU1-UNT0-MH-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%

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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-ASU1-UNT0-A-MH1-RTD-1	10.093	1.0028	0.0879	0.0055	13275.00	LAB	150.540	150.426	9.95	9.938	NT
AITR1392-ASU1-UNT0-A-MH1-RTD-2	10.094	1.0027	0.0894	0.0056	FM	IPPED/NO BREA			10.24	10.405	NT
AITR1392-ASU1-UNT0-A-MH1-RTD-3	10.097	1.0025	0.0880	0.0055	12293.00	LGT	139.297	139.349	9.71	9.709	NT
AITR1392-ASU1-UNT0-A-MH1-RTD-4	10.096	1.0026	0.0890	0.0056	12869.00	LAB	144.171	145.864	10.00	10.118	NT
AITR1392-ASU1-UNT0-A-MH2-RTD-1	10.043	1.0062	0.0891	0.0056	13185.00	LGM/LAB	147.013	148.906	9.87	10.000	NT
AITR1392-ASU1-UNT0-A-MH2-RTD-2	10.041	1.0071	0.0887	0.0055	13059.00	LAT	146.134	147.352	9.49	9.569	NT
AITR1392-ASU1-UNT0-A-MH2-RTD-3	10.039	1.0063	0.0892	0.0056	11860.00	LAT/DWB	132.132	133.933	9.40	9.528	NT
AITR1392-ASU1-UNT0-A-MH2-RTD-4	10.032	1.0075	0.0881	0.0055	13037.00	LWB/DWB/LAT	146.818	147.040	9.78	9.795	NT
AITR1392-ASU1-UNT0-B-MH1-RTD-1	10.031	1.0057	0.0892	0.0056	13710.00	LAB	152.766	154.907	10.16	10.302	NT
AITR1392-ASU1-UNT0-B-MH1-RTD-2	10.028	1.0054	0.0900	0.0056	12470.00	LAT	137.816	140.948	9.67	9.886	NT
AITR1392-ASU1-UNT0-B-MH1-RTD-3	10.031	1.0017	0.0891	0.0056	10599.00	LAT	118.706	120.235	9.82	9.948	NT
AITR1392-ASU1-UNT0-B-MH1-RTD-4	10.032	1.0057	0.0897	0.0056	FM	LIT			9.70	9.889	NT
AITR1392-ASU1-UNT0-B-MH2-RTD-1	10.055	1.0073	0.0874	0.0055	12873.00	LAB	146.165	145.224	10.01	9.950	NT
AITR1392-ASU1-UNT0-B-MH2-RTD-2	10.057	1.0073	0.0891	0.0056	13189.00	DGM/LAT/LAB	146.892	148.784	9.85	9.973	NT
AITR1392-ASU1-UNT0-B-MH2-RTD-3	10.056	1.0078	0.0881	0.0055	13057.00	LAB	147.115	147.227	9.92	9.925	NT
AITR1392-ASU1-UNT0-B-MH2-RTD-4	10.060	1.0073	0.0876	0.0055	FM	LIB			10.10	10.058	NT
AITR1392-ASU1-UNT0-C-MH1-RTD-1	10.069	1.0082	0.0873	0.0055	12962.00	LWB/DGB/LAT	147.330	146.102	9.67	9.588	NT
AITR1392-ASU1-UNT0-C-MH1-RTD-2	10.069	1.0078	0.0891	0.0056	13412.00	DWB/LAT	149.362	151.230	9.85	9.968	NT
AITR1392-ASU1-UNT0-C-MH1-RTD-3	10.063	1.0082	0.0882	0.0055	13091.00	DGB/LAT	147.277	147.556	9.59	9.605	NT
AITR1392-ASU1-UNT0-C-MH1-RTD-4	10.067	1.0080	0.0878	0.0055	NT				NT		NT
AITR1392-ASU1-UNT0-C-MH2-RTD-1	10.066	1.0084	0.0880	0.0055	13187.00	LAB/DWT	148.604	148.604	9.69	9.690	NT
AITR1392-ASU1-UNT0-C-MH2-RTD-2	10.070	1.0088	0.0890	0.0056	12759.00	LAB	142.109	143.724	9.86	9.969	NT
AITR1392-ASU1-UNT0-C-MH2-RTD-3	10.070	1.0080	0.0885	0.0055	12567.00	LAB	140.868	141.669	9.92	9.973	NT
AITR1392-ASU1-UNT0-C-MH2-RTD-4	10.063	1.0086	0.0882	0.0055	FM	LIT			9.81	9.836	NT
Minimum	10.0283	1.0017	0.0873	0.0055	10599.00		118.706	120.235	9.400	9.528	
Maximum	10.0969	1.0088	0.0900	0.0056	13710.00		152.766	154.907	10.242	10.405	
Average	10.0593	1.0063	0.0886	0.0055	12813.37		143.743	144.688	9.828	9.897	
Standard Deviation	0.0217	0.0022	0.0007	0.0000	680.46		7.778	7.554	0.204	0.219	
Coefficient of Variation (%)	0.22	0.22	0.84	0.84	5.31		5.41	5.22	2.07	2.21	
No. Specimens	24	24	24	24	19		19	19	23	23	

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	Orientation			
	AITR	1392	ASU1	UNT0	MH	ETW	[0, 90]4S			

Test Group: AITR1392-ASU1-UNT0-MH-ETW

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

Test Type: 0/90 Unnotched 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-ASU1-UNT0-A-MH1-ETW-1	10.032	1.0038	0.0886	0.0055	12285.00	DAB/LAT	138.137	139.078	10.16	10.233	NT
AITR1392-ASU1-UNT0-A-MH1-ETW-2	10.039	1.0037	0.0898	0.0056	12939.00	DGB/LAT	143.614	146.497	11.06	11.277	NT
AITR1392-ASU1-UNT0-A-MH1-ETW-3	10.037	1.0039	0.0895	0.0056	12150.00	LAT/LAB	135.181	137.536	10.03	10.209	NT
AITR1392-ASU1-UNT0-A-MH1-ETW-4	10.035	1.0040	0.0894	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-A-MH2-ETW-1	10.037	1.0081	0.0891	0.0056	12645.00	LAT/LAB	140.784	142.543	10.53	10.657	NT
AITR1392-ASU1-UNT0-A-MH2-ETW-2	10.030	1.0080	0.0896	0.0056	12754.00	DAB/LAT	141.262	143.777	10.14	10.321	NT
AITR1392-ASU1-UNT0-A-MH2-ETW-3	10.009	1.0090	0.0895	0.0056	12789.00	DGB/LAT	141.619	144.033	10.05	10.216	NT
AITR1392-ASU1-UNT0-A-MH2-ETW-4	10.040	1.0084	0.0895	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH1-ETW-1	10.034	1.0022	0.0888	0.0055	11863.00	LAT	133.349	134.511	9.71	9.790	NT
AITR1392-ASU1-UNT0-B-MH1-ETW-2	10.036	1.0036	0.0908	0.0057	12320.00	DAT/LAB	135.196	139.498	9.74	10.045	NT
AITR1392-ASU1-UNT0-B-MH1-ETW-3	10.036	1.0024	0.0903	0.0056	12170.00	LAT/LAB	134.396	137.960	9.64	9.896	NT
AITR1392-ASU1-UNT0-B-MH1-ETW-4	10.030	1.0042	0.0905	0.0057	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH2-ETW-1	10.058	1.0074	0.0889	0.0056	11825.00	LAB	132.083	133.384	10.04	10.134	NT
AITR1392-ASU1-UNT0-B-MH2-ETW-2	10.061	1.0084	0.0897	0.0056	12228.00	LAT/LAB	135.240	137.802	9.92	10.106	NT
AITR1392-ASU1-UNT0-B-MH2-ETW-3	10.059	1.0083	0.0880	0.0055	12555.00	DMB/DAT	141.545	141.491	10.06	10.052	NT
AITR1392-ASU1-UNT0-B-MH2-ETW-4	10.059	1.0085	0.0891	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-C-MH1-ETW-1	10.070	1.0089	0.0882	0.0055	12693.00	LAT/LAB	142.583	142.962	9.50	9.523	NT
AITR1392-ASU1-UNT0-C-MH1-ETW-2	10.069	1.0087	0.0882	0.0055	10690.00	LAB	120.198	120.426	10.04	10.060	NT
AITR1392-ASU1-UNT0-C-MH1-ETW-3	10.072	1.0082	0.0891	0.0056	12292.00	DAT/LAB	136.891	138.550	9.40	9.509	NT
AITR1392-ASU1-UNT0-C-MH1-ETW-4	10.067	1.0088	0.0874	0.0055	NT				NT		NT
AITR1392-ASU1-UNT0-C-MH2-ETW-1	10.070	1.0082	0.0888	0.0056	13029.00	DAB/LAT	145.475	146.853	10.40	10.496	NT
AITR1392-ASU1-UNT0-C-MH2-ETW-2	10.069	1.0086	0.0884	0.0055	12125.00	DAB/LAT	135.987	136.605	9.97	10.013	NT
AITR1392-ASU1-UNT0-C-MH2-ETW-3	10.070	1.0084	0.0892	0.0056	13153.00	DMT/LAT/DAB	146.277	148.216	10.06	10.188	NT
AITR1392-ASU1-UNT0-C-MH2-ETW-4	10.072	1.0090	0.0895	0.0056	NT				NT		NT
Minimum	10.0088	1.0022	0.0874	0.0055	10690.00		120.198	120.426	9.395	9.509	
Maximum	10.0718	1.0090	0.0908	0.0057	13153.00		146.277	148.216	11.055	11.277	
Average	10.0496	1.0068	0.0891	0.0056	12361.39		137.768	139.540	10.023	10.151	
Standard Deviation	0.0183	0.0024	0.0008	0.0001	567.13		6.113	6.360	0.384	0.401	
Coefficient of Variation (%)	0.18	0.24	0.90	0.90	4.59		4.44	4.56	3.83	3.95	
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	Orientation			
	AITR	1392	ASU1	UNT0	MH	ETW2	[0, 90]4S			

Test Group: AITR1392-ASU1-UNT0-MH-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%

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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-ASU1-UNT0-A-MH1-ETW2-1	10.039	1.0037	0.0895	0.0056	11800.00	LAT/LAB	131.309	133.597	GE		NT
AITR1392-ASU1-UNT0-A-MH1-ETW2-2	10.032	1.0039	0.0896	0.0056	12022.00	DWB/LAT	133.703	136.083	GE		NT
AITR1392-ASU1-UNT0-A-MH1-ETW2-3	10.034	1.0038	0.0897	0.0056	12499.00	LAT	138.810	141.492	GE		NT
AITR1392-ASU1-UNT0-A-MH1-ETW2-4	10.033	1.0034	0.0903	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-A-MH2-ETW2-1	10.033	1.0078	0.0893	0.0056	11616.00	LAT	129.067	130.974	11.19	11.351	NT
AITR1392-ASU1-UNT0-A-MH2-ETW2-2	10.044	1.0076	0.0885	0.0055	11974.00	LAT/LAB	134.224	135.037	10.30	10.359	NT
AITR1392-ASU1-UNT0-A-MH2-ETW2-3	10.042	1.0074	0.0891	0.0056	11441.00	LAT	127.511	129.056	10.85	10.977	NT
AITR1392-ASU1-UNT0-A-MH2-ETW2-4	10.034	1.0077	0.0887	0.0055	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH1-ETW2-1	10.035	1.0034	0.0903	0.0056	11695.00	DWB/LAT	129.117	132.443	10.37	10.636	NT
AITR1392-ASU1-UNT0-B-MH1-ETW2-2	10.034	1.0036	0.0899	0.0056	12138.00	DWB/LAT	134.578	137.432	11.11	11.341	NT
AITR1392-ASU1-UNT0-B-MH1-ETW2-3	10.037	1.0064	0.0914	0.0057	10849.00	LAT	117.939	122.496	10.59	10.995	NT
AITR1392-ASU1-UNT0-B-MH1-ETW2-4	10.034	1.0062	0.0899	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-B-MH2-ETW2-1	10.056	1.0080	0.0890	0.0056	11697.00	DWB/LAT	130.380	131.861	GE		NT
AITR1392-ASU1-UNT0-B-MH2-ETW2-2	10.059	1.0087	0.0887	0.0055	11818.00	DWB/LAT	132.140	133.142	GE		NT
AITR1392-ASU1-UNT0-B-MH2-ETW2-3	10.063	1.0084	0.0887	0.0055	11986.00	DWB/LAT	134.004	135.070	GE		NT
AITR1392-ASU1-UNT0-B-MH2-ETW2-4	10.059	1.0083	0.0901	0.0056	NT				NT		NT
AITR1392-ASU1-UNT0-C-MH1-ETW2-1	10.078	1.0093	0.0903	0.0056	12047.00	DWB/LAT	132.128	135.632	11.10	11.391	NT
AITR1392-ASU1-UNT0-C-MH1-ETW2-2	10.068	1.0089	0.0892	0.0056	12456.00	LAT/LAB	138.461	140.297	GE		NT
AITR1392-ASU1-UNT0-C-MH1-ETW2-3	10.069	1.0088	0.0884	0.0055	11971.00	DWB/LAT	134.182	134.843	10.47	10.522	NT
AITR1392-ASU1-UNT0-C-MH1-ETW2-4	10.071	1.0088	0.0886	0.0055	NT				NT		NT
AITR1392-ASU1-UNT0-C-MH2-ETW2-1	10.071	1.0089	0.0892	0.0056	11481.00	LAT	127.528	129.315	11.05	11.205	NT
AITR1392-ASU1-UNT0-C-MH2-ETW2-2	10.074	1.0085	0.0896	0.0056	11932.00	DWB/LAT	132.052	134.453	GE		NT
AITR1392-ASU1-UNT0-C-MH2-ETW2-3	10.073	1.0082	0.0897	0.0056	11887.00	LAT/LAB	131.437	133.976	GE		NT
AITR1392-ASU1-UNT0-C-MH2-ETW2-4	10.066	1.0083	0.0890	0.0056	NT				NT		NT
Minimum	10.0324	1.0034	0.0884	0.0055	10849.00		117.939	122.496	10.297	10.359	
Maximum	10.0778	1.0093	0.0914	0.0057	12499.00		138.810	141.492	11.186	11.391	
Average	10.0515	1.0070	0.0894	0.0056	11850.50		131.587	133.733	10.778	10.975	
Standard Deviation	0.0169	0.0021	0.0007	0.0000	376.32		4.643	4.285	0.351	0.387	
Coefficient of Variation (%)	0.17	0.21	0.81	0.81	3.18		3.53	3.20	3.25	3.53	
No. Specimens	24	24	24	24	18		18	18	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	Orientation			
	AITR	1392	ASU1	UNC0	MH	CTD	[90, 0]4S			

Test Group: AITR1392-ASU1-UNC0-MH-CTD

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

Test Type: 90/0 Compression Condition: CTD

Test Method: MP1114 (ASTMD6641) 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-ASU1-UNC0-A-MH1-CTD-1	5.506	0.5031	0.0894	0.0056	NT				NT		NT
AITR1392-ASU1-UNC0-A-MH1-CTD-2	5.507	0.5071	0.0891	0.0056	4855.00	BGT	107.440	108.803	9.14	9.256	GE
AITR1392-ASU1-UNC0-A-MH1-CTD-3	5.506	0.5075	0.0879	0.0055	NT				NT		NT
AITR1392-ASU1-UNC0-A-MH1-CTD-4	5.504	0.5084	0.0875	0.0055	5501.00	BGB	123.675	122.949	9.21	9.16	0.040
AITR1392-ASU1-UNC0-A-MH2-CTD-1	5.506	0.5093	0.0881	0.0055	5426.00	BGB	120.875	121.058	8.78	8.797	0.042
AITR1392-ASU1-UNC0-A-MH2-CTD-2	5.506	0.5063	0.0894	0.0056	5640.00	BGT	124.550	126.578	8.57	8.711	0.043
AITR1392-ASU1-UNC0-A-MH2-CTD-3	5.505	0.5064	0.0893	0.0056	5224.00	BGT	115.542	117.227	9.71	9.856	0.037
AITR1392-ASU1-UNC0-A-MH2-CTD-4	5.506	0.5094	0.0889	0.0056	5132.00	BGT	113.325	114.484	9.28	9.379	0.029
AITR1392-ASU1-UNC0-B-MH1-CTD-1	5.502	0.5065	0.0856	0.0053	5313.00	HGT	122.598	119.208	9.95	9.674	0.063
AITR1392-ASU1-UNC0-B-MH1-CTD-2	5.505	0.5072	0.0852	0.0053	5499.00	HGM	127.194	123.195	9.07	8.788	0.038
AITR1392-ASU1-UNC0-B-MH1-CTD-3	5.502	0.5070	0.0855	0.0053	5669.00	BGT	130.828	127.062	8.51	8.268	0.028
AITR1392-ASU1-UNC0-B-MH1-CTD-4	5.505	0.5069	0.0855	0.0053	5544.00	BGT	127.977	124.293	9.72	9.444	0.058
AITR1392-ASU1-UNC0-B-MH2-CTD-1	5.508	0.5070	0.0885	0.0055	6093.00	HIT/BGT	135.854	136.574	9.21	9.256	0.041
AITR1392-ASU1-UNC0-B-MH2-CTD-2	5.507	0.5085	0.0885	0.0055	5940.00	HIT/BGT	132.002	132.752	9.24	9.291	0.024
AITR1392-ASU1-UNC0-B-MH2-CTD-3	5.508	0.5074	0.0885	0.0055	5952.00	HGB	132.513	133.291	8.63	8.685	0.042
AITR1392-ASU1-UNC0-B-MH2-CTD-4	5.508	0.5070	0.0883	0.0055	5212.00	HIT/HGT	116.393	116.811	9.05	9.082	0.031
AITR1392-ASU1-UNC0-C-MH1-CTD-1	5.508	0.5068	0.0858	0.0054	5107.00	BGB	117.500	114.518	8.63	8.406	0.023
AITR1392-ASU1-UNC0-C-MH1-CTD-2	5.507	0.5075	0.0881	0.0055	6195.00	HGM	138.593	138.724	8.90	8.911	0.024
AITR1392-ASU1-UNC0-C-MH1-CTD-3	5.508	0.5068	0.0883	0.0055	5990.00	BGT	133.895	134.301	9.10	9.132	0.039
AITR1392-ASU1-UNC0-C-MH1-CTD-4	5.509	0.5079	0.0867	0.0054	5848.00	HGM	132.761	130.850	8.99	8.865	0.032
AITR1392-ASU1-UNC0-C-MH2-CTD-1	5.508	0.5073	0.0868	0.0054	5529.00	HGM	125.515	123.851	9.16	9.034	0.039
AITR1392-ASU1-UNC0-C-MH2-CTD-2	5.507	0.5070	0.0870	0.0054	5194.00	BGT	117.709	116.416	9.52	9.412	0.050
AITR1392-ASU1-UNC0-C-MH2-CTD-3	5.507	0.5074	0.0863	0.0054	5327.00	HIB/BGT	121.700	119.303	8.86	8.682	0.032
AITR1392-ASU1-UNC0-C-MH2-CTD-4	5.507	0.5078	0.0867	0.0054	5348.00	HIT/BGT	121.528	119.686	9.29	9.148	0.054
Minimum	5.5016	0.5031	0.0852	0.0053	4855.00		107.440	108.803	8.513	8.268	0.0230
Maximum	5.5085	0.5094	0.0894	0.0056	6195.00		138.593	138.724	9.949	9.856	0.0630
Average	5.5063	0.5072	0.0875	0.0055	5524.45		124.544	123.724	9.115	9.056	0.0385
Standard Deviation	0.0018	0.0012	0.0014	0.0001	357.48		8.036	8.005	0.381	0.390	0.0110
Coefficient of Variation (%)	0.03	0.24	1.57	1.57	6.47		6.45	6.47	4.18	4.31	28.50
No. Specimens	24	24	24	24	22		22	22	22	22	21

Notes:

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

A-MH1-1 & A-MH1-3 GAGES NOT TESTED DUE TO FAULTY GAGES

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition	Orientation			
	AITR	1392	ASU1	UNC0	MH	RTD	[90, 0]4S			

Test Group: AITR1392-ASU1-UNC0-MH-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%

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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-ASU1-UNC0-A-MH1-RTD-1	5.506	0.5068	0.0892	0.0056	5000.00	HIT/BGT	110.645	112.112	8.67	8.789	0.035
AITR1392-ASU1-UNC0-A-MH1-RTD-2	5.505	0.5065	0.0883	0.0055	4993.00	HIT/BGT	111.612	112.014	8.92	8.947	0.040
AITR1392-ASU1-UNC0-A-MH1-RTD-3	5.507	0.5087	0.0898	0.0056	5133.00	BGT	112.373	114.671	8.54	8.716	0.026
AITR1392-ASU1-UNC0-A-MH1-RTD-4	5.506	0.5092	0.0883	0.0055	5278.00	BGM	117.354	117.799	8.69	8.718	0.035
AITR1392-ASU1-UNC0-A-MH2-RTD-1	5.506	0.5093	0.0893	0.0056	4377.00	HIT/BGM	96.197	97.654	9.66	9.806	0.033
AITR1392-ASU1-UNC0-A-MH2-RTD-2	5.495	0.5065	0.0890	0.0056	4607.00	BGT	102.245	103.368	9.65	9.753	0.030
AITR1392-ASU1-UNC0-A-MH2-RTD-3	5.507	0.5094	0.0891	0.0056	4765.00	HIT/BGM	104.985	106.297	10.59	10.719	0.034
AITR1392-ASU1-UNC0-A-MH2-RTD-4	5.505	0.5069	0.0886	0.0055	5013.00	HIT/BGB	111.571	112.374	8.71	8.768	0.038
AITR1392-ASU1-UNC0-B-MH1-RTD-1	5.504	0.5076	0.0856	0.0053	4507.00	BGT	103.747	100.898	9.00	8.755	0.028
AITR1392-ASU1-UNC0-B-MH1-RTD-2	5.506	0.5059	0.0854	0.0053	4976.00	HIT/HGB	115.242	111.772	9.30	9.021	0.032
AITR1392-ASU1-UNC0-B-MH1-RTD-3	5.507	0.5065	0.0853	0.0053	4482.00	HIB/BGB	103.793	100.550	8.89	8.610	0.031
AITR1392-ASU1-UNC0-B-MH1-RTD-4	5.499	0.5066	0.0851	0.0053	4965.00	HIT/BGT	115.121	111.371	9.75	9.429	0.041
AITR1392-ASU1-UNC0-B-MH2-RTD-1	5.504	0.5075	0.0871	0.0054	4774.00	HIT/BGT	107.973	106.890	9.27	9.174	0.031
AITR1392-ASU1-UNC0-B-MH2-RTD-2	5.507	0.5065	0.0897	0.0056	4965.00	BGM/HIT	109.335	111.385	8.48	8.640	0.040
AITR1392-ASU1-UNC0-B-MH2-RTD-3	5.508	0.5069	0.0885	0.0055	4603.00	BGT	102.652	103.196	8.97	9.020	0.039
AITR1392-ASU1-UNC0-B-MH2-RTD-4	5.508	0.5068	0.0886	0.0055	5055.00	BGB	112.542	113.352	9.41	9.475	0.037
AITR1392-ASU1-UNC0-C-MH1-RTD-1	5.508	0.5076	0.0874	0.0055	5093.00	BGM	114.763	114.024	8.53	8.471	0.034
AITR1392-ASU1-UNC0-C-MH1-RTD-2	5.508	0.5069	0.0862	0.0054	4500.00	BGT	102.994	100.887	8.74	8.563	0.030
AITR1392-ASU1-UNC0-C-MH1-RTD-3	5.509	0.5073	0.0875	0.0055	4827.00	BGT	108.806	108.126	9.03	8.973	0.034
AITR1392-ASU1-UNC0-C-MH1-RTD-4	5.508	0.5071	0.0865	0.0054	4443.00	BGT	101.322	99.557	9.18	9.017	0.030
AITR1392-ASU1-UNC0-C-MH2-RTD-1	5.508	0.5078	0.0873	0.0055	4841.00	BGT	109.160	108.333	8.50	8.437	0.034
AITR1392-ASU1-UNC0-C-MH2-RTD-2	5.507	0.5078	0.0871	0.0054	4738.00	BGT	107.116	106.021	8.29	8.209	0.041
AITR1392-ASU1-UNC0-C-MH2-RTD-3	5.507	0.5071	0.0871	0.0054	4888.00	HIT/HAT	110.667	109.536	8.81	8.723	0.030
AITR1392-ASU1-UNC0-C-MH2-RTD-4	5.504	0.5090	0.0863	0.0054	4460.00	BGB	101.572	99.571	9.82	9.627	0.033
Minimum	5.4954	0.5059	0.0851	0.0053	4377.00		96.197	97.654	8.294	8.209	0.0260
Maximum	5.5087	0.5094	0.0898	0.0056	5278.00		117.354	117.799	10.587	10.719	0.0410
Average	5.5058	0.5074	0.0876	0.0055	4803.46		108.075	107.573	9.058	9.015	0.0340
Standard Deviation	0.0030	0.0010	0.0015	0.0001	254.43		5.427	5.715	0.542	0.555	0.0042
Coefficient of Variation (%)	0.06	0.20	1.67	1.67	5.30		5.02	5.31	5.98	6.16	12.42
No. Specimens	24	24	24	24	24		24	24	24	24	24

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	Orientation			
	AITR	1392	ASU1	UNC0	MH	ETD	[90, 0]4S			

Test Group: AITR1392-ASU1-UNC0-MH-ETD

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

Test Type: 90/0 Compression Condition: ETD

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

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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-A-MH1-ETD-1	5.505	0.5087	0.0880	0.0055	4261.00	BGT	95.209	95.191	9.31	9.312	0.039
AITR1392-ASU1-UNC0-A-MH1-ETD-2	5.505	0.5064	0.0896	0.0056	4328.00	BGT	95.410	97.127	10.37	10.557	0.027
AITR1392-ASU1-UNC0-A-MH1-ETD-3	5.504	0.5074	0.0883	0.0055	3712.00	HIT/BGT	82.830	83.128	9.37	9.406	GE
AITR1392-ASU1-UNC0-A-MH1-ETD-4	5.505	0.5082	0.0894	0.0056	3991.00	BGT	87.846	89.244	10.09	10.250	0.033
AITR1392-ASU1-UNC0-A-MH2-ETD-1	5.505	0.5093	0.0879	0.0055	4530.00	BGT	101.151	101.075	9.03	9.022	0.032
AITR1392-ASU1-UNC0-A-MH2-ETD-2	5.505	0.5097	0.0908	0.0057	4786.00	HIT/BGT	103.387	106.696	11.33	11.695	0.032
AITR1392-ASU1-UNC0-A-MH2-ETD-3	5.505	0.5071	0.0894	0.0056	4183.00	BGT	92.269	93.737	9.84	10.001	0.034
AITR1392-ASU1-UNC0-A-MH2-ETD-4	5.505	0.5064	0.0898	0.0056	3550.00	HIT/BGT	78.046	79.657	9.55	9.750	0.040
AITR1392-ASU1-UNC0-B-MH1-ETD-1	5.506	0.5072	0.0848	0.0053	3839.00	BGT	89.240	86.011	9.01	8.687	0.031
AITR1392-ASU1-UNC0-B-MH1-ETD-2	5.506	0.5070	0.0857	0.0054	3879.00	BGT	89.275	86.942	10.06	9.792	0.034
AITR1392-ASU1-UNC0-B-MH1-ETD-3	5.506	0.5063	0.0855	0.0053	4607.00	HIT/BGT	106.474	103.408	10.27	9.975	0.025
AITR1392-ASU1-UNC0-B-MH1-ETD-4	5.503	0.5068	0.0849	0.0053	4297.00	HIT/BGM	99.847	96.349	9.20	8.879	0.030
AITR1392-ASU1-UNC0-B-MH2-ETD-1	5.508	0.5076	0.0882	0.0055	4241.00	BGT	94.764	94.943	9.31	9.326	0.023
AITR1392-ASU1-UNC0-B-MH2-ETD-2	5.508	0.5071	0.0887	0.0055	4348.00	HIB/BGB	96.696	97.428	9.04	9.106	0.033
AITR1392-ASU1-UNC0-B-MH2-ETD-3	5.508	0.5079	0.0895	0.0056	4520.00	HGT	99.465	101.123	8.90	9.052	0.041
AITR1392-ASU1-UNC0-B-MH2-ETD-4	5.499	0.5083	0.0882	0.0055	4054.00	BGT	90.461	90.632	8.97	8.986	0.030
AITR1392-ASU1-UNC0-C-MH1-ETD-1	5.503	0.5072	0.0866	0.0054	4371.00	HIT/BGM	99.520	97.937	9.48	9.327	0.026
AITR1392-ASU1-UNC0-C-MH1-ETD-2	5.508	0.5087	0.0874	0.0055	4413.00	HIB/HGM	99.263	98.587	8.20	8.141	0.029
AITR1392-ASU1-UNC0-C-MH1-ETD-3	5.508	0.5089	0.0873	0.0055	4301.00	BGB	96.780	96.047	9.48	9.412	0.023
AITR1392-ASU1-UNC0-C-MH1-ETD-4	5.507	0.5091	0.0875	0.0055	4419.00	HIT/BGT	99.213	98.630	10.11	10.053	0.018
AITR1392-ASU1-UNC0-C-MH2-ETD-1	5.507	0.5067	0.0875	0.0055	4151.00	HIB/BGT	93.632	93.100	8.93	8.875	0.035
AITR1392-ASU1-UNC0-C-MH2-ETD-2	5.496	0.5089	0.0868	0.0054	4110.00	HIB/HGT	93.015	91.781	9.54	9.416	0.030
AITR1392-ASU1-UNC0-C-MH2-ETD-3	5.497	0.5085	0.0870	0.0054	4279.00	HIB/BGB	96.767	95.631	9.37	9.259	0.037
AITR1392-ASU1-UNC0-C-MH2-ETD-4	5.507	0.5072	0.0870	0.0054	4073.00	HIT/BGT	92.344	91.260	9.30	9.191	0.024
Minimum	5.4958	0.5063	0.0848	0.0053	3550.00		78.046	79.657	8.197	8.141	0.0180
Maximum	5.5084	0.5097	0.0908	0.0057	4786.00		106.474	106.696	11.332	11.695	0.0410
Average	5.5048	0.5078	0.0877	0.0055	4218.46		94.704	94.403	9.503	9.478	0.0307
Standard Deviation	0.0034	0.0010	0.0016	0.0001	286.68		6.395	6.344	0.640	0.717	0.0058
Coefficient of Variation (%)	0.06	0.20	1.79	1.79	6.80		6.75	6.72	6.74	7.56	19.06
No. Specimens	24	24	24	24	24		24	24	24	24	23

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	Orientation			
	AITR	1392	ASU1	UNC0	MH	ETW	[90, 0]4S			

Test Group: AITR1392-ASU1-UNC0-MH-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%

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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-A-MH1-ETW-1	5.507	0.5060	0.0878	0.0055	2844.00	HAT	64.015	63.870	10.12	10.099	0.053
AITR1392-ASU1-UNC0-A-MH1-ETW-2	5.507	0.5074	0.0896	0.0056	3206.00	BAT	70.540	71.796	9.72	9.896	0.031
AITR1392-ASU1-UNC0-A-MH1-ETW-3	5.508	0.5095	0.0903	0.0056	3805.00	HIB/HAB	82.703	84.865	9.34	9.586	0.031
AITR1392-ASU1-UNC0-A-MH1-ETW-4	5.507	0.5044	0.0894	0.0056	3332.00	HGM	73.896	75.072	GE		GE
AITR1392-ASU1-UNC0-A-MH2-ETW-1	5.506	0.5087	0.0891	0.0056	3111.00	HAT	68.663	69.495	10.18	10.301	0.030
AITR1392-ASU1-UNC0-A-MH2-ETW-2	5.507	0.5090	0.0889	0.0056	3746.00	BGT	82.810	83.626	8.61	8.697	0.033
AITR1392-ASU1-UNC0-A-MH2-ETW-3	5.505	0.5086	0.0881	0.0055	3471.00	BGT	77.494	77.552	9.35	9.360	GE
AITR1392-ASU1-UNC0-A-MH2-ETW-4	5.505	0.5056	0.0888	0.0055	4194.00	HIB/BGB	93.454	94.269	10.05	10.133	0.027
AITR1392-ASU1-UNC0-B-MH1-ETW-1	5.507	0.5054	0.0866	0.0054	3332.00	BAT	76.105	74.923	10.77	10.603	0.037
AITR1392-ASU1-UNC0-B-MH1-ETW-2	5.507	0.5061	0.0866	0.0054	3523.00	BGT	80.418	79.108	9.74	9.579	0.023
AITR1392-ASU1-UNC0-B-MH1-ETW-3	5.507	0.5058	0.0867	0.0054	3405.00	BGT	77.641	76.494	9.58	9.442	0.034
AITR1392-ASU1-UNC0-B-MH1-ETW-4	5.508	0.5056	0.0862	0.0054	3136.00	BGT	71.988	70.488	GE		GE
AITR1392-ASU1-UNC0-B-MH2-ETW-1	5.501	0.5074	0.0904	0.0056	3118.00	BGT	68.001	69.830	10.18	10.453	0.033
AITR1392-ASU1-UNC0-B-MH2-ETW-2	5.508	0.5058	0.0898	0.0056	3357.00	BGT	73.931	75.416	GE		GE
AITR1392-ASU1-UNC0-B-MH2-ETW-3	5.502	0.5075	0.0905	0.0057	3504.00	BGT	76.297	78.465	10.19	10.484	0.041
AITR1392-ASU1-UNC0-B-MH2-ETW-4	5.507	0.5072	0.0898	0.0056	3468.00	BGT	76.114	77.699	9.14	9.327	0.032
AITR1392-ASU1-UNC0-C-MH1-ETW-1	5.510	0.5062	0.0882	0.0055	3499.00	HGM	78.376	78.554	9.28	9.301	0.033
AITR1392-ASU1-UNC0-C-MH1-ETW-2	5.508	0.5067	0.0892	0.0056	3219.00	HIT/HAT	71.199	72.196	9.16	9.284	0.028
AITR1392-ASU1-UNC0-C-MH1-ETW-3	5.508	0.5072	0.0888	0.0055	3397.00	BGT	75.451	76.109	9.42	9.501	0.029
AITR1392-ASU1-UNC0-C-MH1-ETW-4	5.509	0.5077	0.0895	0.0056	3322.00	BGT	73.109	74.355	GE		GE
AITR1392-ASU1-UNC0-C-MH2-ETW-1	5.508	0.5068	0.0866	0.0054	3650.00	HIT/HAB	83.159	81.836	8.85	8.708	0.037
AITR1392-ASU1-UNC0-C-MH2-ETW-2	5.508	0.5080	0.0867	0.0054	3182.00	LIB	72.247	71.179	10.01	9.860	0.043
AITR1392-ASU1-UNC0-C-MH2-ETW-3	5.508	0.5076	0.0875	0.0055	3416.00	BAT	76.945	76.479	9.26	9.206	0.037
AITR1392-ASU1-UNC0-C-MH2-ETW-4	5.508	0.5077	0.0875	0.0055	3340.00	BGM	75.209	74.753	9.75	9.693	0.032
Minimum	5.5007	0.5044	0.0862	0.0054	2844.00		64.015	63.870	8.612	8.697	0.0230
Maximum	5.5104	0.5095	0.0905	0.0057	4194.00		93.454	94.269	10.770	10.603	0.0530
Average	5.5069	0.5070	0.0884	0.0055	3399.04		75.824	76.185	9.635	9.676	0.0339
Standard Deviation	0.0021	0.0013	0.0014	0.0001	272.10		6.043	6.085	0.533	0.548	0.0066
Coefficient of Variation (%)	0.04	0.25	1.56	1.56	8.01		7.97	7.99	5.53	5.67	19.59
No. Specimens	24	24	24	24	24		24	24	20	20	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	Orientation			
	AITR	1392	ASU1	UNC0	MH	ETW2	[90, 0]4S			

Test Group: AITR1392-ASU1-UNC0-MH-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-A-MH1-ETW2-1	5.507	0.5033	0.0885	0.0055	2694.00	HAT	60.509	60.830	GE		GE
AITR1392-ASU1-UNC0-A-MH1-ETW2-2	5.506	0.5051	0.0891	0.0056	2983.00	BAB	66.287	67.115	GE		0.075
AITR1392-ASU1-UNC0-A-MH1-ETW2-3	5.504	0.5097	0.0892	0.0056	3167.00	BAT	69.653	70.603	GE		0.070
AITR1392-ASU1-UNC0-A-MH1-ETW2-4	5.507	0.5069	0.0891	0.0056	3626.00	LIB/LAB	80.289	81.293	GE		0.042
AITR1392-ASU1-UNC0-A-MH2-ETW2-1	5.508	0.5086	0.0907	0.0057	3250.00	HAB	70.479	72.615	GE		0.090
AITR1392-ASU1-UNC0-A-MH2-ETW2-2	5.507	0.5064	0.0897	0.0056	2828.00	HAT	62.277	63.456	GE		0.075
AITR1392-ASU1-UNC0-A-MH2-ETW2-3	5.498	0.5061	0.0883	0.0055	3282.00	HIB/BAB	73.409	73.687	GE		0.057
AITR1392-ASU1-UNC0-A-MH2-ETW2-4	5.507	0.5064	0.0884	0.0055	3298.00	HIB/BGB	73.668	74.002	GE		0.068
AITR1392-ASU1-UNC0-B-MH1-ETW2-1	5.507	0.5066	0.0868	0.0054	3140.00	BAT	71.412	70.439	GE		0.068
AITR1392-ASU1-UNC0-B-MH1-ETW2-2	5.507	0.5061	0.0866	0.0054	3232.00	HIB/HAB	73.776	72.574	GE		0.064
AITR1392-ASU1-UNC0-B-MH1-ETW2-3	5.507	0.5066	0.0856	0.0054	3193.00	HAT	73.626	71.618	GE		0.032
AITR1392-ASU1-UNC0-B-MH1-ETW2-4	5.508	0.5070	0.0857	0.0054	2647.00	HAT	60.901	59.332	GE		GE
AITR1392-ASU1-UNC0-B-MH2-ETW2-1	5.504	0.5069	0.0901	0.0056	3013.00	HAB	65.991	67.541	GE		0.109
AITR1392-ASU1-UNC0-B-MH2-ETW2-2	5.504	0.5073	0.0888	0.0055	2964.00	BAT	65.825	66.399	GE		0.104
AITR1392-ASU1-UNC0-B-MH2-ETW2-3	5.503	0.5073	0.0898	0.0056	2863.00	BAT	62.874	64.136	GE		0.037
AITR1392-ASU1-UNC0-B-MH2-ETW2-4	5.507	0.5068	0.0892	0.0056	3230.00	BAT	71.428	72.429	10.56	10.706	0.033
AITR1392-ASU1-UNC0-C-MH1-ETW2-1	5.510	0.5068	0.0880	0.0055	2570.00	HAT	57.600	57.622	GE		0.072
AITR1392-ASU1-UNC0-C-MH1-ETW2-2	5.509	0.5069	0.0881	0.0055	2970.00	HAT	66.526	66.577	10.05	10.058	0.019
AITR1392-ASU1-UNC0-C-MH1-ETW2-3	5.509	0.5067	0.0881	0.0055	3498.00	HAT	78.395	78.454	GE		0.075
AITR1392-ASU1-UNC0-C-MH1-ETW2-4	5.510	0.5065	0.0869	0.0054	3119.00	BGM	70.867	69.981	GE		0.011
AITR1392-ASU1-UNC0-C-MH2-ETW2-1	5.507	0.5083	0.0871	0.0054	3932.00	HAT	88.779	87.904	9.70	9.601	0.039
AITR1392-ASU1-UNC0-C-MH2-ETW2-2	5.508	0.5071	0.0864	0.0054	3093.00	HIT/HAT	70.617	69.307	GE		0.046
AITR1392-ASU1-UNC0-C-MH2-ETW2-3	5.508	0.5072	0.0867	0.0054	3093.00	HAT	70.341	69.302	9.67	9.522	0.038
AITR1392-ASU1-UNC0-C-MH2-ETW2-4	5.507	0.5082	0.0873	0.0055	3307.00	BAT	74.534	73.942	10.12	10.043	0.041
Minimum	5.4979	0.5033	0.0856	0.0054	2570.00		57.600	57.622	9.665	9.522	0.0110
Maximum	5.5102	0.5097	0.0907	0.0057	3932.00		88.779	87.904	10.558	10.706	0.1090
Average	5.5066	0.5069	0.0881	0.0055	3124.67		70.003	70.048	10.019	9.986	0.0575
Standard Deviation	0.0026	0.0012	0.0014	0.0001	304.86		6.928	6.774	0.365	0.472	0.0259
Coefficient of Variation (%)	0.05	0.24	1.58	1.58	9.76		9.90	9.67	3.64	4.72	45.07
No. Specimens	24	24	24	24	24		24	24	5	5	22

Notes:

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

C-MH2-1 TESTED @ 216°F

In-Plane Shear Properties (IPS)--CTD (-65°F)
Strength & Modulus

Solvay MTM45-1/AS4 Unitape 145gsm 32%RW

Specimen Number	Solvay Batch #	Solvay Cure Cycle	Prepreg Lot #	Cure Cycle #	0.2% Offset Strength [ksi]	*Strength at 5% Strain [ksi]	Modulus [Msi]	Avg. Specimen Thickness [in]	# Plies in Laminate	Avg. t_{ply} [in]
AITR1392-ASU1-IPS-B-MH1-1-CTD-1	B	MH1	2	1	8.118	13.01	0.6749	0.04490	8	0.005613
AITR1392-ASU1-IPS-B-MH1-1-CTD-2	B	MH1	2	1	8.330	13.32	0.6845	0.04395	8	0.005494
AITR1392-ASU1-IPS-B-MH1-1-CTD-3	B	MH1	2	1	8.290	13.25	0.6845	0.04448	8	0.005560
AITR1392-ASU1-IPS-B-MH2-1-CTD-1	B	MH2	2	2	8.158	13.08	0.6840	0.04400	8	0.005500
AITR1392-ASU1-IPS-B-MH2-1-CTD-2	B	MH2	2	2	8.406	13.44	0.7017	0.04368	8	0.005460
AITR1392-ASU1-IPS-B-MH2-1-CTD-3	B	MH2	2	2	8.502	13.28	0.7031	0.04397	8	0.005496
AITR1392-ASU1-IPS-B-MH3-1-CTD-1	B	MH3	2	3	8.321	13.44	0.6758	0.04530	8	0.005663
AITR1392-ASU1-IPS-B-MH3-1-CTD-2	B	MH3	2	3	8.177	13.51	0.6676	0.04507	8	0.005633
AITR1392-ASU1-IPS-B-MH3-1-CTD-3	B	MH3	2	3	8.268	13.39	0.6766	0.04518	8	0.005648
AITR1392-ASU1-IPS-B-MH3-1-CTD-4	B	MH3	2	3	8.459	13.48	0.6891	0.04513	8	0.005642
AITR1392-ASU1-IPS-C-MH1-2-CTD-1	C	MH1	3	1	8.287	13.62	0.6928	0.04358	8	0.005448
AITR1392-ASU1-IPS-C-MH1-2-CTD-2	C	MH1	3	1	8.527	13.42	0.6905	0.04428	8	0.005535
AITR1392-ASU1-IPS-C-MH1-2-CTD-3	C	MH1	3	1	8.440	13.51	0.7035	0.04350	8	0.005438
AITR1392-ASU1-IPS-C-MH2-2-CTD-1	C	MH2	3	2	8.432	13.57	0.7081	0.04323	8	0.005404
AITR1392-ASU1-IPS-C-MH2-2-CTD-2	C	MH2	3	2	8.442	13.71	0.7031	0.04340	8	0.005425
AITR1392-ASU1-IPS-C-MH2-2-CTD-3	C	MH2	3	2	8.382	13.81	0.7092	0.04332	8	0.005415
AITR1392-ASU1-IPS-C-MH3-1-CTD-1	C	MH3	3	3	8.565	13.72	0.7102	0.04315	8	0.005394
AITR1392-ASU1-IPS-C-MH3-1-CTD-2	C	MH3	3	3	8.523	13.51	0.7066	0.04335	8	0.005419
AITR1392-ASU1-IPS-C-MH3-1-CTD-3	C	MH3	3	3	8.482	13.40	0.7024	0.04362	8	0.005452
AITR1392-ASU1-IPS-C-MH3-1-CTD-4	C	MH3	3	3	8.491	13.40	0.7080	0.04337	8	0.005421
AITR1392-ASU1-IPS-D-MH1-1-CTD-1	D	MH1	4	1	8.533	13.37	0.7054	0.04292	8	0.005365
AITR1392-ASU1-IPS-D-MH1-1-CTD-2	D	MH1	4	1	8.603	13.28	0.6940	0.04297	8	0.005371
AITR1392-ASU1-IPS-D-MH1-1-CTD-3	D	MH1	4	1	8.399	13.44	0.7008	0.04275	8	0.005344
AITR1392-ASU1-IPS-D-MH1-1-CTD-4	D	MH1	4	1	8.365	13.22	0.6904	0.04263	8	0.005329
AITR1392-ASU1-IPS-D-MH2-1-CTD-1	D	MH2	4	2	8.176	12.92	0.6703	0.04378	8	0.005473
AITR1392-ASU1-IPS-D-MH2-1-CTD-2	D	MH2	4	2	8.170	13.03	0.6742	0.04442	8	0.005552
AITR1392-ASU1-IPS-D-MH2-1-CTD-3	D	MH2	4	2	8.066	12.96	0.6673	0.04388	8	0.005485
AITR1392-ASU1-IPS-D-MH2-1-CTD-4	D	MH2	4	2	8.267	13.23	0.6734	0.04352	8	0.005440
Average					**8.363**	**13.37**	**0.6911**			**0.005479**
Standard Dev.					**0.1477**	**0.2273**	**0.01426**			
Coeff. of Var. [%]					**1.765**	**1.700**	**2.064**			
Min.					**8.066**	**12.92**	**0.6673**			**0.005329**
Max.					**8.603**	**13.81**	**0.7102**			**0.005663**
Number of Spec.					**28**	**28**	**28**			**28**

*A noise due to material behavior was observed toward 5% shear strain for all specimens.

Batches B, C & D: Specimens were tested by NIAR Wichita, KS.

In-Plane Shear Properties (IPS)--RTD (70°F)
Strength & Modulus

Solvay MTM45-1/AS4 Unitape 145gsm 32%RW

Specimen Number	Solvay Batch #	Solvay Cure Cycle	Prepreg Lot #	Cure Cycle #	0.2% Offset Strength [ksi]	Strength at 5% Strain [ksi]	Modulus [Msi]	Avg. Specimen Thickness [in]	# Plies in Laminate	Avg. t_{ply} [in]
AITR1392-ASU1-IPS-B-MH1-1-RTD-1	B	MH1	2	1	6.171	9.667	0.5621	0.04455	8	0.005569
AITR1392-ASU1-IPS-B-MH1-2-RTD-5	B	MH1	2	1	6.292	9.823	0.5721	0.04417	8	0.005521
AITR1392-ASU1-IPS-B-MH1-2-RTD-6	B	MH1	2	1	6.251	9.763	0.5729	0.04422	8	0.005527
AITR1392-ASU1-IPS-B-MH2-1-RTD-1	B	MH2	2	2	6.259	9.731	0.5650	0.04363	8	0.005454
AITR1392-ASU1-IPS-B-MH2-2-RTD-5	B	MH2	2	2	6.293	9.863	0.5669	0.04398	8	0.005498
AITR1392-ASU1-IPS-B-MH2-2-RTD-6	B	MH2	2	2	6.213	9.702	0.5629	0.04448	8	0.005560
AITR1392-ASU1-IPS-B-MH3-1-RTD-1	B	MH3	2	3	6.213	9.734	0.5557	0.04525	8	0.005656
AITR1392-ASU1-IPS-B-MH3-1-RTD-2	B	MH3	2	3	6.147	9.733	0.5472	0.04485	8	0.005606
AITR1392-ASU1-IPS-B-MH3-1-RTD-3	B	MH3	2	3	6.296	9.832	0.5583	0.04538	8	0.005673
AITR1392-ASU1-IPS-B-MH3-1-RTD-4	B	MH3	2	3	6.277	9.842	0.5611	0.04468	8	0.005585
AITR1392-ASU1-IPS-C-MH1-2-RTD-1	C	MH1	3	1	6.349	9.903	0.5731	0.04338	8	0.005423
AITR1392-ASU1-IPS-C-MH1-2-RTD-5	C	MH1	3	1	6.353	9.795	0.5769	0.04335	8	0.005419
AITR1392-ASU1-IPS-C-MH1-2-RTD-6	C	MH1	3	1	6.575	10.18	0.5980	0.04262	8	0.005327
AITR1392-ASU1-IPS-C-MH2-2-RTD-5	C	MH2	3	2	6.424	9.943	0.5864	0.04322	8	0.005402
AITR1392-ASU1-IPS-C-MH2-2-RTD-6	C	MH2	3	2	6.425	10.03	0.5816	0.04340	8	0.005425
AITR1392-ASU1-IPS-C-MH2-2-RTD-7	C	MH2	3	2	6.250	9.809	0.5656	0.04327	8	0.005408
AITR1392-ASU1-IPS-C-MH3-1-RTD-1	C	MH3	3	3	6.373	9.987	0.5834	0.04337	8	0.005421
AITR1392-ASU1-IPS-C-MH3-1-RTD-2	C	MH3	3	3	6.274	9.736	0.5616	0.04313	8	0.005392
AITR1392-ASU1-IPS-C-MH3-1-RTD-3	C	MH3	3	3	6.332	9.735	0.5689	0.04328	8	0.005410
AITR1392-ASU1-IPS-C-MH3-1-RTD-4	C	MH3	3	3	6.491	10.01	0.5822	0.04320	8	0.005400
AITR1392-ASU1-IPS-D-MH1-1-RTD-1	D	MH1	4	1	6.476	9.964	0.5840	0.04230	8	0.005288
AITR1392-ASU1-IPS-D-MH1-1-RTD-2	D	MH1	4	1	6.526	10.09	0.5908	0.04262	8	0.005327
AITR1392-ASU1-IPS-D-MH1-1-RTD-3	D	MH1	4	1	6.561	10.14	0.5903	0.04230	8	0.005288
AITR1392-ASU1-IPS-D-MH1-1-RTD-4	D	MH1	4	1	6.404	9.873	0.5747	0.04268	8	0.005335
AITR1392-ASU1-IPS-D-MH2-1-RTD-1	D	MH2	4	2	6.170	9.693	0.5530	0.04408	8	0.005510
AITR1392-ASU1-IPS-D-MH2-1-RTD-2	D	MH2	4	2	6.032	9.487	0.5389	0.04430	8	0.005538
AITR1392-ASU1-IPS-D-MH2-1-RTD-3	D	MH2	4	2	6.138	9.560	0.5490	0.04427	8	0.005533
AITR1392-ASU1-IPS-D-MH2-1-RTD-4	D	MH2	4	2	6.187	9.650	0.5535	0.04392	8	0.005490

Batches B, C & D: Specimens were tested by NIAR Wichita, KS.

Average	**6.313**	**9.831**	**0.5691**	**0.005464**
Standard Dev.	**0.1363**	**0.1671**	**0.01462**	
Coeff. of Var. [%]	**2.159**	**1.700**	**2.569**	
Min.	**6.032**	**9.487**	**0.5389**	**0.005288**
Max.	**6.575**	**10.18**	**0.5980**	**0.005673**
Number of Spec.	**28**	**28**	**28**	**28**

In-Plane Shear Properties (IPS)--ETD (200°F)
Strength & Modulus

Solvay MTM45-1/AS4 Unitape 145gsm 32%RW

Specimen Number	Solvay Batch #	Solvay Cure Cycle	Prepreg Lot #	Cure Cycle #	0.2% Offset Strength [ksi]	Strength at 5% Strain [ksi]	Modulus [Msi]	Avg. Specimen Thickness [in]	# Plies in Laminate	Avg. t_{ply} [in]
AITR1392-ASU1-IPS-B-MH3-1-ETD-1	B	MH3	2	3	4.830	7.294	0.4748	0.04458	8	0.005573
AITR1392-ASU1-IPS-B-MH3-1-ETD-2	B	MH3	2	3	4.838	7.210	0.4484	0.04427	8	0.005533
AITR1392-ASU1-IPS-B-MH3-1-ETD-3	B	MH3	2	3	4.845	7.199	0.4527	0.04458	8	0.005573
AITR1392-ASU1-IPS-B-MH3-1-ETD-4	B	MH3	2	3	4.917	7.317	0.4617	0.04473	8	0.005592
AITR1392-ASU1-IPS-C-MH3-1-ETD-1	C	MH3	3	3	4.942	7.318	0.4831	0.04318	8	0.005398
AITR1392-ASU1-IPS-C-MH3-1-ETD-2	C	MH3	3	3	5.074	7.424	0.4739	0.04287	8	0.005358
AITR1392-ASU1-IPS-C-MH3-1-ETD-3	C	MH3	3	3	4.858	7.257	0.4753	0.04362	8	0.005452
AITR1392-ASU1-IPS-C-MH3-1-ETD-4	C	MH3	3	3	5.001	7.361	0.4657	0.04342	8	0.005427
AITR1392-ASU1-IPS-D-MH1-1-ETD-1	D	MH1	4	1	4.905	7.353	0.4780	0.04270	8	0.005338
AITR1392-ASU1-IPS-D-MH1-1-ETD-2	D	MH1	4	1	4.978	7.294	0.4645	0.04272	8	0.005340
AITR1392-ASU1-IPS-D-MH1-1-ETD-3	D	MH1	4	1	4.894	7.297	0.4804	0.04277	8	0.005346
AITR1392-ASU1-IPS-D-MH1-1-ETD-4	D	MH1	4	1	4.973	7.294	0.4620	0.04277	8	0.005346
AITR1392-ASU1-IPS-D-MH2-1-ETD-1	D	MH2	4	2	4.983	7.385	0.4659	0.04382	8	0.005477
AITR1392-ASU1-IPS-D-MH2-1-ETD-2	D	MH2	4	2	4.853	7.208	0.4532	0.04378	8	0.005473
AITR1392-ASU1-IPS-D-MH2-1-ETD-3	D	MH2	4	2	4.836	7.190	0.4499	0.04375	8	0.005469
AITR1392-ASU1-IPS-D-MH2-1-ETD-4	D	MH2	4	2	4.755	7.142	0.4462	0.04395	8	0.005494

Batches B, C & D: Specimens were tested by NIAR Wichita, KS.

Average	**4.905**	**7.284**	**0.4647**	**0.005449**
Standard Dev.	**0.08220**	**0.07810**	**0.01206**	
Coeff. of Var. [%]	**1.676**	**1.072**	**2.594**	
Min.	**4.755**	**7.142**	**0.4462**	**0.005338**
Max.	**5.074**	**7.424**	**0.4831**	**0.005592**
Number of Spec.	**16**	**16**	**16**	**16**

In-Plane Shear Properties (IPS)--ETW (200°F)
Strength & Modulus
Solvay MTM45-1/AS4 Unitape 145gsm 32%RW

Specimen Number	Solvay Batch #	Solvay Cure Cycle	Prepreg Lot #	Cure Cycle #	0.2% Offset Strength [ksi]	Strength at 5% Strain [ksi]	Modulus [Msi]	Avg. Specimen Thickness [in]	# Plies in Laminate	Avg. t_{ply} [in]
AITR1392-ASU1-IPS-B-MH1-1-ETW-1	B	MH1	2	1	4.172	6.131	0.4361	0.04405	8	0.005506
AITR1392-ASU1-IPS-B-MH1-1-ETW-2	B	MH1	2	1	4.126	6.053	0.4287	0.04402	8	0.005502
AITR1392-ASU1-IPS-B-MH1-1-ETW-3	B	MH1	2	1	4.118	6.037	0.4209	0.04425	8	0.005531
AITR1392-ASU1-IPS-B-MH2-1-ETW-1*	B	MH2	2	2	4.269		0.4366	0.04450	8	0.005563
AITR1392-ASU1-IPS-B-MH2-1-ETW-2	B	MH2	2	2	4.233	6.174	0.4317	0.04450	8	0.005563
AITR1392-ASU1-IPS-B-MH2-1-ETW-3	B	MH2	2	2	4.263	6.218	0.4425	0.04362	8	0.005452
AITR1392-ASU1-IPS-B-MH3-2-ETW-1	B	MH3	2	3	4.083	6.026	0.4143	0.04378	8	0.005473
AITR1392-ASU1-IPS-B-MH3-2-ETW-2	B	MH3	2	3	4.143	6.068	0.4202	0.04417	8	0.005521
AITR1392-ASU1-IPS-B-MH3-2-ETW-3	B	MH3	2	3	4.223	6.232	0.4306	0.04403	8	0.005504
AITR1392-ASU1-IPS-B-MH3-2-ETW-4	B	MH3	2	3	4.272	6.324	0.4364	0.04428	8	0.005535
AITR1392-ASU1-IPS-C-MH1-2-ETW-1	C	MH1	3	1	4.160	6.088	0.4327	0.04303	8	0.005379
AITR1392-ASU1-IPS-C-MH1-2-ETW-2	C	MH1	3	1	4.138	6.092	0.4315	0.04283	8	0.005354
AITR1392-ASU1-IPS-C-MH1-2-ETW-3	C	MH1	3	1	4.209	6.186	0.4440	0.04287	8	0.005358
AITR1392-ASU1-IPS-C-MH2-2-ETW-1	C	MH2	3	2	4.029	5.853	0.4159	0.04395	8	0.005494
AITR1392-ASU1-IPS-C-MH2-2-ETW-2	C	MH2	3	2	3.999	5.859	0.4155	0.04420	8	0.005525
AITR1392-ASU1-IPS-C-MH2-2-ETW-3	C	MH2	3	2	4.086	5.973	0.4256	0.04370	8	0.005463
AITR1392-ASU1-IPS-C-MH3-2-ETW-1	C	MH3	3	3	4.287	6.279	0.4394	0.04275	8	0.005344
AITR1392-ASU1-IPS-C-MH3-2-ETW-2	C	MH3	3	3	4.119	6.026	0.4224	0.04358	8	0.005448
AITR1392-ASU1-IPS-C-MH3-2-ETW-3	C	MH3	3	3	4.141	6.063	0.4232	0.04345	8	0.005431
AITR1392-ASU1-IPS-C-MH3-2-ETW-4	C	MH3	3	3	4.181	6.081	0.4276	0.04337	8	0.005421
AITR1392-ASU1-IPS-D-MH1-2-ETW-1	D	MH1	4	1	4.190	6.141	0.4238	0.04348	8	0.005435
AITR1392-ASU1-IPS-D-MH1-2-ETW-2	D	MH1	4	1	4.174	6.246	0.4298	0.04298	8	0.005373
AITR1392-ASU1-IPS-D-MH1-2-ETW-3	D	MH1	4	1	4.152	6.207	0.4199	0.04347	8	0.005433
AITR1392-ASU1-IPS-D-MH1-2-ETW-4	D	MH1	4	1	4.118	6.106	0.4187	0.04383	8	0.005479
AITR1392-ASU1-IPS-D-MH2-2-ETW-1	D	MH2	4	2	4.133	6.107	0.4190	0.04375	8	0.005469
AITR1392-ASU1-IPS-D-MH2-2-ETW-2	D	MH2	4	2	4.120	6.063	0.4210	0.04402	8	0.005502
AITR1392-ASU1-IPS-D-MH2-2-ETW-3	D	MH2	4	2	4.142	6.106	0.4234	0.04432	8	0.005540
AITR1392-ASU1-IPS-D-MH2-2-ETW-4	D	MH2	4	2	4.164	6.151	0.4224	0.04408	8	0.005510
Average					**4.159**	**6.107**	**0.4269**			**0.005468**
Standard Dev.					**0.06914**	**0.1109**	**0.008264**			
Coeff. of Var. [%]					**1.663**	**1.817**	**1.936**			
Min.					**3.999**	**5.853**	**0.4143**			**0.005344**
Max.					**4.287**	**6.324**	**0.4440**			**0.005563**
Number of Spec.					**28**	**27**	**28**			**28**

*Strength for 5% strain are not available because strain gage data acquisition hardware error.
Batches B, C & D: Specimens were tested by NIAR Wichita, KS.

In-Plane Shear Properties (IPS)--ETW2 (250°F)
Strength & Modulus

Solvay MTM45-1/AS4 Unitape 145gsm 32%RW

Specimen Number	Solvay Batch #	Solvay Cure Cycle	Prepreg Lot #	Cure Cycle #	0.2% Offset Strength [ksi]	Strength at 5% Strain [ksi]	Modulus [Msi]	Avg. Specimen Thickness [in]	# Plies in Laminate	Avg. t_{ply} [in]
AITR1392-ASU1-IPS-B-MH1-1-ETW2-1	B	MH1	2	1	3.251	4.810	0.3436	0.04407	8	0.005508
AITR1392-ASU1-IPS-B-MH1-1-ETW2-2	B	MH1	2	1	3.235	4.794	0.3438	0.04347	8	0.005433
AITR1392-ASU1-IPS-B-MH1-1-ETW2-3	B	MH1	2	1	3.146	4.646	0.3348	0.04360	8	0.005450
AITR1392-ASU1-IPS-B-MH2-1-ETW2-1	B	MH2	2	2	3.317	4.902	0.3468	0.04377	8	0.005471
AITR1392-ASU1-IPS-B-MH2-1-ETW2-2	B	MH2	2	2	3.332	4.918	0.3512	0.04398	8	0.005498
AITR1392-ASU1-IPS-B-MH2-1-ETW2-3	B	MH2	2	2	3.226	4.784	0.3463	0.04400	8	0.005500
AITR1392-ASU1-IPS-B-MH3-2-ETW2-1	B	MH3	2	3	3.161	4.677	0.3301	0.04418	8	0.005523
AITR1392-ASU1-IPS-B-MH3-2-ETW2-2	B	MH3	2	3	3.182	4.691	0.3312	0.04427	8	0.005533
AITR1392-ASU1-IPS-B-MH3-2-ETW2-3	B	MH3	2	3	3.203	4.736	0.3359	0.04348	8	0.005435
AITR1392-ASU1-IPS-B-MH3-2-ETW2-4	B	MH3	2	3	3.168	4.649	0.3282	0.04373	8	0.005467
AITR1392-ASU1-IPS-C-MH1-2-ETW2-1	C	MH1	3	1	3.277	4.880	0.3497	0.04338	8	0.005423
AITR1392-ASU1-IPS-C-MH1-2-ETW2-2	C	MH1	3	1	3.171	4.740	0.3393	0.04363	8	0.005454
AITR1392-ASU1-IPS-C-MH1-2-ETW2-3	C	MH1	3	1	3.143	4.629	0.3389	0.04358	8	0.005448
AITR1392-ASU1-IPS-C-MH2-2-ETW2-1	C	MH2	3	2	3.318	4.885	0.3505	0.04360	8	0.005450
AITR1392-ASU1-IPS-C-MH2-2-ETW2-2	C	MH2	3	2	3.373	4.933	0.3592	0.04312	8	0.005390
AITR1392-ASU1-IPS-C-MH2-2-ETW2-3	C	MH2	3	2	3.309	4.897	0.3536	0.04342	8	0.005427
AITR1392-ASU1-IPS-C-MH3-2-ETW2-1	C	MH3	3	3	3.425	5.021	0.3545	0.04302	8	0.005377
AITR1392-ASU1-IPS-C-MH3-2-ETW2-2	C	MH3	3	3	3.390	4.914	0.3476	0.04333	8	0.005417
AITR1392-ASU1-IPS-C-MH3-2-ETW2-3	C	MH3	3	3	3.269	4.819	0.3378	0.04333	8	0.005417
AITR1392-ASU1-IPS-C-MH3-2-ETW2-4	C	MH3	3	3	3.197	4.693	0.3277	0.04343	8	0.005429
AITR1392-ASU1-IPS-D-MH1-2-ETW2-1	D	MH1	4	1	3.249	4.826	0.3355	0.04348	8	0.005435
AITR1392-ASU1-IPS-D-MH1-2-ETW2-2	D	MH1	4	1	3.295	4.918	0.3446	0.04317	8	0.005396
AITR1392-ASU1-IPS-D-MH1-2-ETW2-3	D	MH1	4	1	3.243	4.829	0.3378	0.04317	8	0.005396
AITR1392-ASU1-IPS-D-MH1-2-ETW2-4	D	MH1	4	1	3.208	4.768	0.3365	0.04338	8	0.005423
AITR1392-ASU1-IPS-D-MH2-2-ETW2-1	D	MH2	4	2	3.223	4.735	0.3375	0.04437	8	0.005546
AITR1392-ASU1-IPS-D-MH2-2-ETW2-2	D	MH2	4	2	3.152	4.648	0.3283	0.04478	8	0.005598
AITR1392-ASU1-IPS-D-MH2-2-ETW2-3	D	MH2	4	2	3.155	4.631	0.3274	0.04428	8	0.005535
AITR1392-ASU1-IPS-D-MH2-2-ETW2-4	D	MH2	4	2	3.175	4.715	0.3277	0.04402	8	0.005502

Batches B, C & D: Specimens were tested by NIAR Wichita, KS.

Average	**3.243**	**4.789**	**0.3402**	**0.005460**
Standard Dev.	**0.07858**	**0.1097**	**0.009213**	
Coeff. of Var. [%]	**2.423**	**2.292**	**2.708**	
Min.	**3.143**	**4.629**	**0.3274**	**0.005377**
Max.	**3.425**	**5.021**	**0.3592**	**0.005598**
Number of Spec.	**28**	**28**	**28**	**28**

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition	Orientation
	AITR	1392	ASU1	SBS	MH	CTD	[0]16

Test Group: AITR1392-ASU1-SBS-MH-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): 0.35

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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-A-MH1-CTD-1	0.518	0.2545	0.0901	0.0056	491.00	ILS	16.059	16.443
AITR1392-ASU1-SBS-A-MH1-CTD-2	0.514	0.2543	0.0880	0.0055	485.00	ILS	16.259	16.252
AITR1392-ASU1-SBS-A-MH1-CTD-3	0.515	0.2545	0.0895	0.0056	463.00	ILS	15.251	15.505
AITR1392-ASU1-SBS-A-MH1-CTD-4	0.515	0.2550	0.0889	0.0056	NT			
AITR1392-ASU1-SBS-A-MH2-CTD-1	0.510	0.2550	0.0887	0.0055	515.00	ILS	17.083	17.213
AITR1392-ASU1-SBS-A-MH2-CTD-2	0.515	0.2555	0.0869	0.0054	513.00	FCC/ILS	17.335	17.112
AITR1392-ASU1-SBS-A-MH2-CTD-3	0.516	0.2550	0.0918	0.0057	517.00	ILS	16.558	17.279
AITR1392-ASU1-SBS-A-MH2-CTD-4	0.518	0.2555	0.0890	0.0056	NT			
AITR1392-ASU1-SBS-B-MH1-CTD-1	0.512	0.2565	0.0877	0.0055	468.00	ILS	15.598	15.550
AITR1392-ASU1-SBS-B-MH1-CTD-2	0.518	0.2550	0.0884	0.0055	471.00	ILS	15.671	15.742
AITR1392-ASU1-SBS-B-MH1-CTD-3	0.515	0.2557	0.0876	0.0055	507.00	FCC/ILS	16.985	16.901
AITR1392-ASU1-SBS-B-MH1-CTD-4	0.516	0.2565	0.0876	0.0055	NT			
AITR1392-ASU1-SBS-B-MH2-CTD-1	0.516	0.2565	0.0864	0.0054	514.00	ILS	17.395	17.079
AITR1392-ASU1-SBS-B-MH2-CTD-2	0.517	0.2560	0.0869	0.0054	490.00	ILS	16.526	16.313
AITR1392-ASU1-SBS-B-MH2-CTD-3	0.517	0.2555	0.0869	0.0054	487.00	ILS	16.457	16.245
AITR1392-ASU1-SBS-B-MH2-CTD-4	0.518	0.2555	0.0878	0.0055	NT			
AITR1392-ASU1-SBS-C-MH1-CTD-1	0.516	0.2555	0.0842	0.0053	482.00	ILS	16.804	16.078
AITR1392-ASU1-SBS-C-MH1-CTD-2	0.516	0.2555	0.0856	0.0053	474.00	ILS	16.261	15.811
AITR1392-ASU1-SBS-C-MH1-CTD-3	0.514	0.2555	0.0845	0.0053	451.00	ILS	15.661	15.044
AITR1392-ASU1-SBS-C-MH1-CTD-4	0.516	0.2560	0.0836	0.0052	NT			
AITR1392-ASU1-SBS-C-MH2-CTD-1	0.514	0.2550	0.0863	0.0054	478.00	ILS	16.284	15.976
AITR1392-ASU1-SBS-C-MH2-CTD-2	0.517	0.2555	0.0880	0.0055	465.00	ILS	15.511	15.511
AITR1392-ASU1-SBS-C-MH2-CTD-3	0.516	0.2565	0.0871	0.0054	495.00	ILS	16.617	16.447
AITR1392-ASU1-SBS-C-MH2-CTD-4	0.517	0.2545	0.0881	0.0055	NT			
Minimum	0.5095	0.2543	0.0836	0.0052	451.00		15.251	15.044
Maximum	0.5180	0.2565	0.0918	0.0057	517.00		17.395	17.279
Average	0.5153	0.2554	0.0875	0.0055	487.00		16.351	16.250
Standard Deviation	0.0020	0.0007	0.0019	0.0001	20.04		0.636	0.665
Coefficient of Variation (%)	0.38	0.26	2.12	2.12	4.12		3.89	4.09
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	Orientation	
	AITR	1392	ASU1	OHT1	MH	CTD	[45,0,-45,90]3S	

Test Group: AITR1392-ASU1-OHT1-MH-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)

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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, ksi
AITR1392-ASU1-OHT1-A-MH1-CTD-1	11.5041	1.5088	0.1338	0.0056	0.2511	85.9584	0.0887	11819.69	58.53	AGM	59.35
AITR1392-ASU1-OHT1-A-MH1-CTD-2	11.5040	1.5080	0.1341	0.0056	0.2510	85.8081	0.0889	11402.03	56.40	AGM	57.28
AITR1392-ASU1-OHT1-A-MH1-CTD-3	11.5042	1.5084	0.1346	0.0056	0.2499	85.4695	0.0892	11819.54	58.22	AGM	59.36
AITR1392-ASU1-OHT1-A-MH1-CTD-4	11.5039	1.5085	0.1341	0.0056	0.2506	85.7860	0.0889	NT			
AITR1392-ASU1-OHT1-A-MH2-CTD-1	11.5042	1.5091	0.1351	0.0056	0.2512	85.1322	0.0895	11583.12	56.80	AGM	58.15
AITR1392-ASU1-OHT1-A-MH2-CTD-2	11.5039	1.5095	0.1340	0.0056	0.2510	85.8714	0.0887	12033.99	59.51	AGM	60.40
AITR1392-ASU1-OHT1-A-MH2-CTD-3	11.5035	1.5093	0.1341	0.0056	0.2506	85.7617	0.0889	11482.11	56.72	AGM	57.63
AITR1392-ASU1-OHT1-A-MH2-CTD-4	11.5042	1.4997	0.1339	0.0056	0.2511	85.9164	0.0893	NT			
AITR1392-ASU1-OHT1-B-MH1-CTD-1	11.5023	1.5046	0.1302	0.0054	0.2515	88.3433	0.0865	11287.01	57.62	AGM	56.83
AITR1392-ASU1-OHT1-B-MH1-CTD-2	11.5023	1.5049	0.1284	0.0054	0.2503	89.5818	0.0853	11313.40	58.55	AGM	56.95
AITR1392-ASU1-OHT1-B-MH1-CTD-3	11.5026	1.5041	0.1278	0.0053	0.2508	90.0282	0.0849	11071.96	57.61	AGM	55.77
AITR1392-ASU1-OHT1-B-MH1-CTD-4	11.5033	1.5051	0.1305	0.0054	0.2511	88.1479	0.0867	NT			
AITR1392-ASU1-OHT1-B-MH2-CTD-1	11.5000	1.5085	0.1319	0.0055	0.2510	87.1652	0.0875	11345.35	57.00	AGM	56.98
AITR1392-ASU1-OHT1-B-MH2-CTD-2	11.5002	1.5088	0.1315	0.0055	0.2507	87.4318	0.0872	11810.61	59.51	AGM	59.30
AITR1392-ASU1-OHT1-B-MH2-CTD-3	11.4995	1.5086	0.1325	0.0055	0.2509	86.8105	0.0878	11498.39	57.54	AGM	57.74
AITR1392-ASU1-OHT1-B-MH2-CTD-4	11.4993	1.5088	0.1306	0.0054	0.2510	88.0722	0.0865	NT			
AITR1392-ASU1-OHT1-C-MH1-CTD-1	11.5000	1.5089	0.1305	0.0054	0.2511	88.1001	0.0865	11656.82	59.18	AGM	58.53
AITR1392-ASU1-OHT1-C-MH1-CTD-2	11.5004	1.5088	0.1276	0.0053	0.2512	90.1285	0.0846	11420.10	59.32	AGM	57.34
AITR1392-ASU1-OHT1-C-MH1-CTD-3	11.5016	1.5084	0.1272	0.0053	0.2511	90.3977	0.0843	11258.52	58.66	AGM	56.54
AITR1392-ASU1-OHT1-C-MH1-CTD-4	11.4930	1.5080	0.1300	0.0054	0.2511	88.4077	0.0862	NT			
AITR1392-ASU1-OHT1-C-MH2-CTD-1	11.5014	1.5082	0.1336	0.0056	0.2512	86.0668	0.0886	11218.61	55.66	AGM	56.35
AITR1392-ASU1-OHT1-C-MH2-CTD-2	11.5011	1.5085	0.1322	0.0055	0.2511	86.9758	0.0877	11112.52	55.71	AGM	55.81
AITR1392-ASU1-OHT1-C-MH2-CTD-3	11.5018	1.5088	0.1304	0.0054	0.2501	88.2265	0.0864	10839.77	55.11	AGM	54.43
AITR1392-ASU1-OHT1-C-MH2-CTD-4	11.5017	1.5083	0.1314	0.0055	0.2511	87.5320	0.0871	NT			
Minimum	11.4930	1.4997	0.1272	0.0053	0.2499	85.1322	0.0843	10839.7740	55.1077		54.4258
Maximum	11.5042	1.5095	0.1351	0.0056	0.2515	90.3977	0.0895	12033.9860	59.5134		60.3952
Average	11.5018	1.5076	0.1317	0.0055	0.2509	87.3800	0.0873	11442.9742	57.6472		57.4850
Standard Deviation	0.0025	0.0023	0.0024	0.0001	0.0004	1.5862	0.0016	305.4455	1.3882		1.5091
Coefficient of Variation (%)	0.02	0.15	1.81	1.81	0.15	1.82	1.79	2.67	2.41		2.63
No. Specimens	24	24	24	24	24	24	24	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	Orientation	
	AITR	1392	ASU1	OHT1	MH	RTD	[45,0,-45,90]3S	

Test Group: AITR1392-ASU1-OHT1-MH-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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHT1-A-MH1-RTD-1	11.5037	1.5089	0.1348	0.0056	0.2510	85.3179	0.0894	11846.47	58.23	AGM	59.48
AITR1392-ASU1-OHT1-A-MH1-RTD-2	11.5040	1.5080	0.1345	0.0056	0.2495	85.5316	0.0892	11508.10	56.74	AGM	57.81
AITR1392-ASU1-OHT1-A-MH1-RTD-3	11.5038	1.5089	0.1332	0.0056	0.2492	86.3649	0.0883	11585.78	57.64	AGM	58.17
AITR1392-ASU1-OHT1-A-MH1-RTD-4					0.0000			NT			
AITR1392-ASU1-OHT1-A-MH2-RTD-1	11.5034	1.4944	0.1343	0.0056	0.2511	85.6758	0.0898	11176.98	55.70	AGM	56.66
AITR1392-ASU1-OHT1-A-MH2-RTD-2	11.5040	1.5095	0.1339	0.0056	0.2511	85.8935	0.0887	11626.50	57.51	AGM	58.35
AITR1392-ASU1-OHT1-A-MH2-RTD-3	11.5036	1.5098	0.1346	0.0056	0.2508	85.4651	0.0892	11620.69	57.18	AGM	58.31
AITR1392-ASU1-OHT1-A-MH2-RTD-4					0.0000			NT			
AITR1392-ASU1-OHT1-B-MH1-RTD-1	11.5027	1.5042	0.1282	0.0053	0.2515	89.7480	0.0852	11275.96	58.49	AGM	56.79
AITR1392-ASU1-OHT1-B-MH1-RTD-2	11.5032	1.5046	0.1281	0.0053	0.2512	89.7752	0.0852	11679.94	60.59	AGM	58.81
AITR1392-ASU1-OHT1-B-MH1-RTD-3	11.5030	1.5046	0.1283	0.0053	0.2509	89.6804	0.0853	11298.36	58.55	AGM	56.89
AITR1392-ASU1-OHT1-B-MH1-RTD-4					0.0000			NT			
AITR1392-ASU1-OHT1-B-MH2-RTD-1	11.4989	1.5084	0.1319	0.0055	0.2513	87.1789	0.0874	11559.34	58.10	AGM	58.06
AITR1392-ASU1-OHT1-B-MH2-RTD-2	11.4984	1.5088	0.1301	0.0054	0.2503	88.4039	0.0862	11532.15	58.76	AGM	57.90
AITR1392-ASU1-OHT1-B-MH2-RTD-3	11.4989	1.5088	0.1317	0.0055	0.2509	87.3334	0.0873	11641.96	58.60	AGM	58.46
AITR1392-ASU1-OHT1-B-MH2-RTD-4	11.4984	1.5083	0.1321	0.0055	0.2510	87.0431	0.0876	NT			
AITR1392-ASU1-OHT1-C-MH1-RTD-1	11.5015	1.5089	0.1268	0.0053	0.2512	90.7297	0.0840	11298.74	59.07	AGM	56.73
AITR1392-ASU1-OHT1-C-MH1-RTD-2	11.5015	1.5086	0.1275	0.0053	0.2509	90.2078	0.0845	11346.53	58.99	AGM	56.98
AITR1392-ASU1-OHT1-C-MH1-RTD-3	11.5009	1.5086	0.1285	0.0054	0.2508	89.4780	0.0852	11118.06	57.34	AGM	55.83
AITR1392-ASU1-OHT1-C-MH1-RTD-4	11.5004	1.5093	0.1289	0.0054	0.2510	89.2196	0.0854	NT			
AITR1392-ASU1-OHT1-C-MH2-RTD-1	11.5005	1.5091	0.1311	0.0055	0.2507	87.7008	0.0869	11448.40	57.85	AGM	57.47
AITR1392-ASU1-OHT1-C-MH2-RTD-2	11.4964	1.5090	0.1322	0.0055	0.2503	86.9400	0.0876	11124.65	55.75	AGM	55.85
AITR1392-ASU1-OHT1-C-MH2-RTD-3	11.5003	1.5080	0.1332	0.0056	0.2511	86.3386	0.0883	10837.94	53.96	AGM	54.45
AITR1392-ASU1-OHT1-C-MH2-RTD-4	11.5009	1.5086	0.1317	0.0055	0.2509	87.3486	0.0873	NT			
Minimum	11.4964	1.4944	0.1268	0.0053	0.0000	85.3179	0.0840	10837.9420	53.9574		54.4479
Maximum	11.5040	1.5098	0.1348	0.0056	0.2515	90.7297	0.0898	11846.4650	60.5853		59.4777
Average	11.5014	1.5075	0.1312	0.0055	0.2194	87.6845	0.0870	11418.1406	57.7248		57.3883
Standard Deviation	0.0022	0.0034	0.0026	0.0001	0.0847	1.7572	0.0018	252.2255	1.5098		1.2362
Coefficient of Variation (%)	0.02	0.23	2.00	2.00	38.61	2.00	2.02	2.21	2.62		2.15
No. Specimens	21	21	21	21	24	21	21	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	Orientation	
	AITR	1392	ASU1	OHT1	MH	ETW	[45,0,-45,90]3S	

Test Group: AITR1392-ASU1-OHT1-MH-ETW

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

Test Type: Open-Hole Tension Layup 1 Condition: ETW #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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHT1-A-MH1-ETW-1	11.5034	1.5104	0.1354	0.0056	0.2508	84.9377	0.0897	10822.94	52.91	AGM	54.29
AITR1392-ASU1-OHT1-A-MH1-ETW-2	11.5038	1.5102	0.1355	0.0056	0.2512	84.8991	0.0897	10864.52	53.09	AGM	54.50
AITR1392-ASU1-OHT1-A-MH1-ETW-3	11.5037	1.5103	0.1358	0.0057	0.2511	84.7316	0.0899	11197.59	54.61	AGM	56.17
AITR1392-ASU1-OHT1-A-MH1-ETW-4		1.5096			0.0000			NT			
AITR1392-ASU1-OHT1-A-MH2-ETW-1	11.5039	1.5097	0.1376	0.0057	0.2503	83.6042	0.0911	11001.15	52.96	AGM	55.20
AITR1392-ASU1-OHT1-A-MH2-ETW-2	11.5037	1.4995	0.1342	0.0056	0.2511	85.6995	0.0895	11146.61	55.38	AGM	56.31
AITR1392-ASU1-OHT1-A-MH2-ETW-3	11.5039	1.5093	0.1349	0.0056	0.2510	85.2981	0.0894	10672.05	52.43	AGM	53.57
AITR1392-ASU1-OHT1-A-MH2-ETW-4	11.5036	1.5092	0.1360	0.0057	0.2508	84.5855	0.0901	NT			
Minimum	11.5034	1.4995	0.1342	0.0056	0.0000	83.6042	0.0894	10672.0480	52.4297		53.5683
Maximum	11.5039	1.5104	0.1376	0.0057	0.2512	85.6995	0.0911	11197.5900	55.3766		56.3135
Average	11.5037	1.5085	0.1356	0.0057	0.2195	84.8223	0.0899	10950.8085	53.5623		55.0064
Standard Deviation	0.0002	0.0037	0.0011	0.0000	0.0887	0.6536	0.0006	201.6314	1.1560		1.0897
Coefficient of Variation (%)	0.00	0.24	0.77	0.77	40.41	0.77	0.66	1.84	2.16		1.98
No. Specimens	7	8	7	7	8	7	7	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	Orientation	
	AITR	1392	ASU1	OHT1	MH	ETW2	[45,0,-45,90]3S	

Test Group: AITR1392-ASU1-OHT1-MH-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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHT1-A-MH1-ETW2-1	11.5036	1.5098	0.1350	0.0056	0.2512	85.2121	0.0894	11022.23	54.08	AGM	55.31
AITR1392-ASU1-OHT1-A-MH1-ETW2-2	11.5038	1.5103	0.1353	0.0056	0.2512	85.0032	0.0896	10894.11	53.30	AGM	54.64
AITR1392-ASU1-OHT1-A-MH1-ETW2-3	11.5035	1.5087	0.1357	0.0057	0.2508	84.7926	0.0899	11138.64	54.42	AGM	55.93
AITR1392-ASU1-OHT1-A-MH1-ETW2-4	11.5035	1.5099	0.1367	0.0057	0.2511	84.1720	0.0905	NT			
AITR1392-ASU1-OHT1-A-MH2-ETW2-1	11.5033	1.5099	0.1369	0.0057	0.2512	84.0273	0.0907	11967.81	57.90	AGM	60.05
AITR1392-ASU1-OHT1-A-MH2-ETW2-2	11.5038	1.5086	0.1360	0.0057	0.2512	84.6077	0.0901	10945.96	53.37	AGM	54.97
AITR1392-ASU1-OHT1-A-MH2-ETW2-3	11.5036	1.5096	0.1359	0.0057	0.2508	84.6685	0.0900	11107.41	54.15	AGM	55.74
AITR1392-ASU1-OHT1-A-MH2-ETW2-4	11.5039	1.4992	0.1356	0.0057	0.2513	84.8159	0.0905	NT			
AITR1392-ASU1-OHT1-B-MH1-ETW2-1	11.5031	1.4999	0.1298	0.0054	0.2513	88.6217	0.0865	10881.65	55.89	AGM	54.96
AITR1392-ASU1-OHT1-B-MH1-ETW2-2	11.5037	1.5060	0.1318	0.0055	0.2510	87.2812	0.0875	10514.60	52.97	AGM	52.89
AITR1392-ASU1-OHT1-B-MH1-ETW2-3	11.5022	1.5060	0.1321	0.0055	0.2511	87.0719	0.0877	10854.55	54.56	AGM	54.60
AITR1392-ASU1-OHT1-B-MH1-ETW2-4	11.5030	1.5007	0.1331	0.0055	0.2505	86.4021	0.0887	NT			
AITR1392-ASU1-OHT1-B-MH2-ETW2-1	11.5004	1.5090	0.1329	0.0055	0.2512	86.5345	0.0881	11158.70	55.64	AGM	56.02
AITR1392-ASU1-OHT1-B-MH2-ETW2-2	11.5001	1.5095	0.1328	0.0055	0.2512	86.6191	0.0880	10967.50	54.73	AGM	55.04
AITR1392-ASU1-OHT1-B-MH2-ETW2-3	11.5000	1.5090	0.1346	0.0056	0.2512	85.4386	0.0892	11182.51	55.06	AGM	56.14
AITR1392-ASU1-OHT1-B-MH2-ETW2-4	11.5000	1.5094	0.1336	0.0056	0.2512	86.0781	0.0885	NT			
AITR1392-ASU1-OHT1-C-MH1-ETW2-1	11.5013	1.5090	0.1314	0.0055	0.2511	87.5287	0.0871	10474.80	52.83	AGM	52.59
AITR1392-ASU1-OHT1-C-MH1-ETW2-2	11.5011	1.4943	0.1293	0.0054	0.2511	88.9487	0.0865	10801.08	55.90	AGM	54.76
AITR1392-ASU1-OHT1-C-MH1-ETW2-3	11.5003	1.5096	0.1310	0.0055	0.2509	87.7660	0.0868	10817.29	54.69	AGM	54.29
AITR1392-ASU1-OHT1-C-MH1-ETW2-4	11.5004	1.5092	0.1301	0.0054	0.2510	88.4193	0.0862	NT			
AITR1392-ASU1-OHT1-C-MH2-ETW2-1	11.5009	1.5080	0.1324	0.0055	0.2508	86.8432	0.0878	10518.57	52.67	AGM	52.84
AITR1392-ASU1-OHT1-C-MH2-ETW2-2	11.5014	1.5081	0.1310	0.0055	0.2502	87.7746	0.0869	10913.89	55.23	AGM	54.82
AITR1392-ASU1-OHT1-C-MH2-ETW2-3	11.5010	1.5086	0.1304	0.0054	0.2510	88.2204	0.0864	10685.40	54.33	AGM	53.66
AITR1392-ASU1-OHT1-C-MH2-ETW2-4	11.5009	1.5087	0.1359	0.0057	0.2512	84.6069	0.0901	NT			
Minimum	11.5000	1.4943	0.1293	0.0054	0.2502	84.0273	0.0862	10474.8020	52.6693		52.5887
Maximum	11.5039	1.5103	0.1369	0.0057	0.2513	88.9487	0.0907	11967.8070	57.8992		60.0485
Average	11.5020	1.5071	0.1333	0.0056	0.2510	86.3106	0.0884	10935.9271	54.5396		54.9590
Standard Deviation	0.0015	0.0042	0.0024	0.0001	0.0003	1.5415	0.0015	336.5412	1.3108		1.6613
Coefficient of Variation (%)	0.01	0.28	1.79	1.79	0.10	1.79	1.70	3.08	2.40		3.02
No. Specimens	24	24	24	24	24	24	24	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	Orientation	
	AITR	1392	ASU1	OHT2	MH	CTD	[45,-45,0,45,-45,90,45,-45,45,-45]S	

Test Group: AITR1392-ASU1-OHT2-MH-CTD

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

Test Type: Open-Hole Tension Layup 2 Condition: CTD #Plies: 20

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, ksi
AITR1392-ASU1-OHT2-A-MH1-CTD-1	12.0056	1.5065	0.1102	0.0055	0.2514	108.9434	0.0732	7440.56	44.82	AGM	44.90
AITR1392-ASU1-OHT2-A-MH1-CTD-2	12.0060	1.5070	0.1098	0.0055	0.2503	109.3443	0.0729	7454.58	45.05	AGM	44.97
AITR1392-ASU1-OHT2-A-MH1-CTD-3	12.0058	1.5065	0.1116	0.0056	0.2502	107.5786	0.0741	7483.35	44.51	AGM	45.16
AITR1392-ASU1-OHT2-A-MH1-CTD-4	12.0058	1.5064	0.1111	0.0056	0.2504	108.0957	0.0737	NT			
AITR1392-ASU1-OHT2-A-MH2-CTD-1	12.0041	1.5073	0.1104	0.0055	0.2512	108.7003	0.0733	7133.65	42.86	AGM	43.02
AITR1392-ASU1-OHT2-A-MH2-CTD-2	12.0043	1.5073	0.1098	0.0055	0.2506	109.3620	0.0728	7461.56	45.10	AGM	45.00
AITR1392-ASU1-OHT2-A-MH2-CTD-3	11.9968	1.5071	0.1095	0.0055	0.2506	109.5929	0.0726	7560.45	45.83	AGM	45.61
AITR1392-ASU1-OHT2-A-MH2-CTD-4	12.0037	1.5068	0.1113	0.0056	0.2513	107.8826	0.0738	NT			
AITR1392-ASU1-OHT2-B-MH1-CTD-1	12.0048	1.5061	0.1062	0.0053	0.2511	113.0041	0.0705	6624.18	41.40	AGM	39.98
AITR1392-ASU1-OHT2-B-MH1-CTD-2	12.0043	1.5073	0.1073	0.0054	0.2508	111.8410	0.0712	6617.54	40.90	AGM	39.91
AITR1392-ASU1-OHT2-B-MH1-CTD-3	12.0047	1.5076	0.1063	0.0053	0.2509	112.9320	0.0705	6955.37	43.40	AGM	41.94
AITR1392-ASU1-OHT2-B-MH1-CTD-4	12.0052	1.5070	0.1054	0.0053	0.2513	113.9377	0.0699	NT			
AITR1392-ASU1-OHT2-B-MH2-CTD-1	12.0044	1.5072	0.1050	0.0053	0.2511	114.2917	0.0697	6838.75	43.20	AGM	41.25
AITR1392-ASU1-OHT2-B-MH2-CTD-2	12.0051	1.5079	0.1059	0.0053	0.2508	113.3623	0.0702	6713.02	42.04	AGM	40.47
AITR1392-ASU1-OHT2-B-MH2-CTD-3	12.0050	1.5077	0.1062	0.0053	0.2505	113.0411	0.0704	6527.28	40.77	AGM	39.36
AITR1392-ASU1-OHT2-B-MH2-CTD-4	12.0051	1.5078	0.1070	0.0053	0.2506	112.2325	0.0709	NT			
AITR1392-ASU1-OHT2-C-MH1-CTD-1	12.0050	1.5070	0.1066	0.0053	0.2510	112.5824	0.0708	7424.63	46.20	AGM	44.79
AITR1392-ASU1-OHT2-C-MH1-CTD-2	12.0056	1.5070	0.1072	0.0054	0.2509	111.9928	0.0711	7387.24	45.73	AGM	44.56
AITR1392-ASU1-OHT2-C-MH1-CTD-3	12.0050	1.5071	0.1076	0.0054	0.2512	111.5364	0.0714	7247.33	44.68	AGM	43.72
AITR1392-ASU1-OHT2-C-MH1-CTD-4	12.0054	1.5072	0.1044	0.0052	0.2506	114.9575	0.0693	NT			
AITR1392-ASU1-OHT2-C-MH2-CTD-1	12.0049	1.5059	0.1085	0.0054	0.2524	110.6779	0.0720	7510.43	45.98	AGM	45.34
AITR1392-ASU1-OHT2-C-MH2-CTD-2	12.0014	1.5079	0.1085	0.0054	0.2512	110.6457	0.0719	7318.28	44.74	AGM	44.12
AITR1392-ASU1-OHT2-C-MH2-CTD-3	12.0019	1.5085	0.1066	0.0053	0.2512	112.6231	0.0706	7268.67	45.21	AGM	43.80
AITR1392-ASU1-OHT2-C-MH2-CTD-4	12.0055	1.5064	0.1067	0.0053	0.2527	112.4813	0.0709	NT			
Minimum	11.9968	1.5059	0.1044	0.0052	0.2502	107.5786	0.0693	6527.2840	40.7664		39.3581
Maximum	12.0060	1.5085	0.1116	0.0056	0.2527	114.9575	0.0741	7560.4480	46.2038		45.6050
Average	12.0044	1.5071	0.1079	0.0054	0.2510	111.3183	0.0716	7164.8253	44.0233		43.2170
Standard Deviation	0.0020	0.0006	0.0021	0.0001	0.0006	2.1673	0.0014	354.5612	1.7786		2.1436
Coefficient of Variation (%)	0.02	0.04	1.96	1.96	0.23	1.95	1.97	4.95	4.04		4.96
No. Specimens	24	24	24	24	24	24	24	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	Orientation	
	AITR	1392	ASU1	OHT2	MH	RTD	[45,-45,0,45,-45,90,45,-45,45,-45]S	

Test Group: AITR1392-ASU1-OHT2-MH-RTD

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

Test Type: Open-Hole Tension Layup 2 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-OHT2-A-MH1-RTD-1	12.0053	1.5015	0.1103	0.0055	0.2509	108.8091	0.0735	6710.08	40.50	AGM	40.63
AITR1392-ASU1-OHT2-A-MH1-RTD-2	12.0061	1.5062	0.1102	0.0055	0.2501	108.9150	0.0732	6842.48	41.21	AGM	41.30
AITR1392-ASU1-OHT2-A-MH1-RTD-3	12.0057	1.5060	0.1111	0.0056	0.2514	108.0621	0.0738	6751.16	40.35	AGM	40.75
AITR1392-ASU1-OHT2-A-MH1-RTD-4					0.0000			NT			
AITR1392-ASU1-OHT2-A-MH2-RTD-1	12.0041	1.5073	0.1066	0.0053	0.2511	112.5736	0.0707	6864.09	42.71	AGM	41.40
AITR1392-ASU1-OHT2-A-MH2-RTD-2	12.0039	1.5066	0.1083	0.0054	0.2511	110.8390	0.0719	6762.10	41.44	AGM	40.80
AITR1392-ASU1-OHT2-A-MH2-RTD-3	12.0043	1.5069	0.1090	0.0055	0.2514	110.0975	0.0724	6876.82	41.85	AGM	41.49
AITR1392-ASU1-OHT2-A-MH2-RTD-4					0.0000			NT			
Minimum	12.0039	1.5015	0.1066	0.0053	0.0000	108.0621	0.0707	6710.0770	40.3496		40.6256
Maximum	12.0061	1.5073	0.1111	0.0056	0.2514	112.5736	0.0738	6876.8210	42.7052		41.4859
Average	12.0049	1.5058	0.1093	0.0055	0.1883	109.8827	0.0726	6801.1208	41.3444		41.0608
Standard Deviation	0.0009	0.0021	0.0016	0.0001	0.1162	1.6496	0.0011	68.8659	0.8760		0.3744
Coefficient of Variation (%)	0.01	0.14	1.50	1.50	61.72	1.50	1.57	1.01	2.12		0.91
No. Specimens	6	6	6	6	8	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	Orientation	
	AITR	1392	ASU1	OHT2	MH	ETW2	[45,-45,0,45,-45,90,45,-45,45,-45]S	

Test Group: AITR1392-ASU1-OHT2-MH-ETW2

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

Test Type: Open-Hole Tension Layup 2 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-OHT2-A-MH1-ETW2-1	11.9993	1.5045	0.1112	0.0056	0.2513	107.9394	0.0739	5778.09	34.55	AGM	34.91
AITR1392-ASU1-OHT2-A-MH1-ETW2-2	11.9993	1.5043	0.1114	0.0056	0.2509	107.7136	0.0741	5754.95	34.34	AGM	34.78
AITR1392-ASU1-OHT2-A-MH1-ETW2-3	11.9990	1.5040	0.1107	0.0055	0.2513	108.4244	0.0736	5682.23	34.14	AGM	34.35
AITR1392-ASU1-OHT2-A-MH1-ETW2-4	11.9993	1.5050	0.1122	0.0056	0.2513	106.9456	0.0746	NT			
AITR1392-ASU1-OHT2-A-MH2-ETW2-1	11.9975	1.5047	0.1109	0.0055	0.2513	108.1508	0.0737	5729.45	34.32	AGM	34.62
AITR1392-ASU1-OHT2-A-MH2-ETW2-2	11.9976	1.5010	0.1109	0.0055	0.2513	108.1843	0.0739	5900.91	35.45	AGM	35.74
AITR1392-ASU1-OHT2-A-MH2-ETW2-3	11.9975	1.5042	0.1110	0.0056	0.2509	108.0531	0.0738	5825.27	34.88	AGM	35.21
AITR1392-ASU1-OHT2-A-MH2-ETW2-4	11.9983	1.5062	0.1119	0.0056	0.2504	107.2234	0.0743	NT			
Minimum	11.9975	1.5010	0.1107	0.0055	0.2504	106.9456	0.0736	5682.2260	34.1392		34.3461
Maximum	11.9993	1.5062	0.1122	0.0056	0.2513	108.4244	0.0746	5900.9070	35.4492		35.7392
Average	11.9985	1.5042	0.1113	0.0056	0.2511	107.8293	0.0740	5778.4830	34.6135		34.9334
Standard Deviation	0.0008	0.0015	0.0005	0.0000	0.0003	0.5081	0.0003	76.6819	0.4808		0.4887
Coefficient of Variation (%)	0.01	0.10	0.48	0.48	0.13	0.47	0.43	1.33	1.39		1.40
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	Orientation	
	AITR	1392	ASU1	OHT3	MH	CTD	[0,0,45,0,90,-45,0,45,0,-45]S	

Test Group: AITR1392-ASU1-OHT3-MH-CTD

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

Test Type: Open-Hole Tension Layup 3 Condition: CTD #Plies: 20

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, ksi
AITR1392-ASU1-OHT3-A-MH1-CTD-1	12.0075	1.5096	0.1122	0.0056	0.2506	106.9869	0.0743	16135.22	95.24	LGM/SGM	97.17
AITR1392-ASU1-OHT3-A-MH1-CTD-2	12.0078	1.5097	0.1116	0.0056	0.2506	107.5646	0.0739	14128.80	83.84	LGM/SGM	85.08
AITR1392-ASU1-OHT3-A-MH1-CTD-3	12.0075	1.5095	0.1113	0.0056	0.2512	107.9164	0.0737	14835.09	88.33	LGM/SGM	89.34
AITR1392-ASU1-OHT3-A-MH1-CTD-4	12.0077	1.5082	0.1117	0.0056	0.2512	107.4672	0.0741	NT			
AITR1392-ASU1-OHT3-A-MH2-CTD-1	12.0047	1.5095	0.1142	0.0057	0.2511	105.1509	0.0756	15668.23	90.92	LGM/SGM	94.36
AITR1392-ASU1-OHT3-A-MH2-CTD-2	12.0052	1.5093	0.1123	0.0056	0.2505	106.8709	0.0744	15515.31	91.51	LGM/SGM	93.45
AITR1392-ASU1-OHT3-A-MH2-CTD-3	12.0049	1.5093	0.1141	0.0057	0.2511	105.2138	0.0756	14713.79	85.44	LGM/SGM	88.62
AITR1392-ASU1-OHT3-A-MH2-CTD-4	12.0054	1.5080	0.1131	0.0057	0.2512	106.1795	0.0750	NT			
AITR1392-ASU1-OHT3-B-MH1-CTD-1	12.0068	1.5090	0.1124	0.0056	0.2517	106.7904	0.0745	15907.53	93.76	LGM/SGM	95.84
AITR1392-ASU1-OHT3-B-MH1-CTD-2	12.0067	1.5097	0.1120	0.0056	0.2506	107.2027	0.0742	15064.28	89.09	LGM/SGM	90.71
AITR1392-ASU1-OHT3-B-MH1-CTD-3	12.0065	1.5095	0.1123	0.0056	0.2517	106.9145	0.0744	15469.98	91.26	LGM/SGM	93.17
AITR1392-ASU1-OHT3-B-MH1-CTD-4	12.0068	1.5091	0.1114	0.0056	0.2510	107.8129	0.0738	NT			
AITR1392-ASU1-OHT3-B-MH2-CTD-1	12.0048	1.5067	0.1103	0.0055	0.2518	108.8048	0.0732	15735.36	94.65	LGM/SGM	94.94
AITR1392-ASU1-OHT3-B-MH2-CTD-2	12.0051	1.5080	0.1101	0.0055	0.2520	109.0712	0.0730	16302.29	98.22	LGM/SGM	98.28
AITR1392-ASU1-OHT3-B-MH2-CTD-3	12.0046	1.5086	0.1092	0.0055	0.2515	109.9661	0.0724	15963.94	96.93	LGM/SGM	96.20
AITR1392-ASU1-OHT3-B-MH2-CTD-4	12.0046	1.5074	0.1140	0.0057	0.2519	105.3346	0.0756	NT			
AITR1392-ASU1-OHT3-C-MH1-CTD-1	12.0050	1.5071	0.1065	0.0053	0.2511	112.7586	0.0706	15116.80	94.21	LGM/SGM	91.19
AITR1392-ASU1-OHT3-C-MH1-CTD-2	12.0052	1.5074	0.1054	0.0053	0.2511	113.8650	0.0699	14114.12	88.81	LGM/SGM	85.12
AITR1392-ASU1-OHT3-C-MH1-CTD-3	12.0050	1.5076	0.1057	0.0053	0.2507	113.5762	0.0701	13398.16	84.08	LGM/SGM	80.79
AITR1392-ASU1-OHT3-C-MH1-CTD-4	12.0052	1.5072	0.1077	0.0054	0.2512	111.5034	0.0714	NT			
AITR1392-ASU1-OHT3-C-MH2-CTD-1	12.0053	1.4970	0.1091	0.0055	0.2525	110.0397	0.0729	14865.66	91.02	LGM/SGM	90.28
AITR1392-ASU1-OHT3-C-MH2-CTD-2	12.0049	1.5050	0.1091	0.0055	0.2509	110.0018	0.0725	13652.67	83.12	LGM/SGM	82.47
AITR1392-ASU1-OHT3-C-MH2-CTD-3	12.0046	1.5056	0.1056	0.0053	0.2521	113.6802	0.0701	13750.67	86.48	LGM/SGM	83.03
AITR1392-ASU1-OHT3-C-MH2-CTD-4	12.0014	1.5075	0.1064	0.0053	0.2511	112.7598	0.0706	NT			
Minimum	12.0014	1.4970	0.1054	0.0053	0.2505	105.1509	0.0699	13398.1620	83.1235		80.7899
Maximum	12.0078	1.5097	0.1142	0.0057	0.2525	113.8650	0.0756	16302.2900	98.2159		98.2754
Average	12.0056	1.5077	0.1103	0.0055	0.2513	108.8930	0.0732	15018.7718	90.3833		90.5567
Standard Deviation	0.0014	0.0026	0.0028	0.0001	0.0005	2.8162	0.0018	902.1389	4.5903		5.3941
Coefficient of Variation (%)	0.01	0.17	2.56	2.56	0.21	2.59	2.50	6.01	5.08		5.96
No. Specimens	24	24	24	24	24	24	24	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	Orientation	
	AITR	1392	ASU1	OHT3	MH	RTD	[0,0,45,0,90,-45,0,45,0,-45]S	

Test Group: AITR1392-ASU1-OHT3-MH-RTD

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

Test Type: Open-Hole Tension Layup 3 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-OHT3-A-MH1-RTD-1	12.0075	1.5075	0.1125	0.0056	0.2512	106.7014	0.0747	16232.46	95.69	MGM	97.89
AITR1392-ASU1-OHT3-A-MH1-RTD-2	12.0074	1.5081	0.1113	0.0056	0.2502	107.8829	0.0738	15014.01	89.45	MGM	90.51
AITR1392-ASU1-OHT3-A-MH1-RTD-3	12.0074	1.5085	0.1114	0.0056	0.2512	107.8189	0.0738	14856.03	88.43	MGM	89.53
AITR1392-ASU1-OHT3-A-MH1-RTD-4	12.0065	1.5066	0.1118	0.0056	0.2502	107.3930	0.0742	NT			
AITR1392-ASU1-OHT3-A-MH2-RTD-1	12.0056	1.5091	0.1116	0.0056	0.2512	107.5446	0.0740	15347.95	91.11	MGM	92.46
AITR1392-ASU1-OHT3-A-MH2-RTD-2	12.0053	1.5094	0.1129	0.0056	0.2508	106.3046	0.0748	15503.23	90.95	MGM	93.37
AITR1392-ASU1-OHT3-A-MH2-RTD-3	12.0055	1.5087	0.1128	0.0056	0.2506	106.4314	0.0748	16205.78	95.22	MGM	97.65
AITR1392-ASU1-OHT3-A-MH2-RTD-4	12.0056	1.5093	0.1121	0.0056	0.2509	107.0972	0.0743	NT			
Minimum	12.0053	1.5066	0.1113	0.0056	0.2502	106.3046	0.0738	14856.0280	88.4325		89.5312
Maximum	12.0075	1.5094	0.1129	0.0056	0.2512	107.8829	0.0748	16232.4570	95.6875		97.8912
Average	12.0063	1.5084	0.1121	0.0056	0.2508	107.1468	0.0743	15526.5750	91.8079		93.5681
Standard Deviation	0.0010	0.0010	0.0006	0.0000	0.0004	0.6135	0.0004	583.8504	2.9972		3.5294
Coefficient of Variation (%)	0.01	0.06	0.57	0.57	0.17	0.57	0.56	3.76	3.26		3.77
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	Orientation	
	AITR	1392	ASU1	OHT3	MH	ETW2	[0,0,45,0,90,-45,0,45,0,-45]S	

Test Group: AITR1392-ASU1-OHT3-MH-ETW2

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

Test Type: Open-Hole Tension Layup 3 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-OHT3-A-MH1-ETW2-1	12.0049	1.5057	0.1118	0.0056	0.2512	107.4104	0.0742	15269.25	90.74	MGM	92.19
AITR1392-ASU1-OHT3-A-MH1-ETW2-2	12.0047	1.5052	0.1112	0.0056	0.2511	107.9236	0.0739	16052.76	95.88	MGM	96.96
AITR1392-ASU1-OHT3-A-MH1-ETW2-3	12.0039	1.5040	0.1131	0.0057	0.2509	106.1040	0.0752	15751.26	92.57	MGM	95.21
AITR1392-ASU1-OHT3-A-MH1-ETW2-4	12.0045	1.5077	0.1120	0.0056	0.2511	107.1511	0.0743	NT			
AITR1392-ASU1-OHT3-A-MH2-ETW2-1	12.0007	1.5077	0.1130	0.0056	0.2506	106.2325	0.0749	15928.20	93.52	MGM	96.04
AITR1392-ASU1-OHT3-A-MH2-ETW2-2	12.0013	1.4998	0.1132	0.0057	0.2511	105.9876	0.0755	16402.67	96.58	MGM	99.42
AITR1392-ASU1-OHT3-A-MH2-ETW2-3	11.9982	1.4977	0.1123	0.0056	0.2512	106.8086	0.0750	15974.74	94.95	MGM	96.97
AITR1392-ASU1-OHT3-A-MH2-ETW2-4	12.0000	1.5058	0.1135	0.0057	0.2507	105.6961	0.0754	NT			
Minimum	11.9982	1.4977	0.1112	0.0056	0.2506	105.6961	0.0739	15269.2450	90.7353		92.1926
Maximum	12.0049	1.5077	0.1135	0.0057	0.2512	107.9236	0.0755	16402.6660	96.5822		99.4211
Average	12.0023	1.5042	0.1125	0.0056	0.2510	106.6642	0.0748	15896.4788	94.0407		96.1314
Standard Deviation	0.0026	0.0036	0.0008	0.0000	0.0002	0.7834	0.0006	374.7773	2.1923		2.3906
Coefficient of Variation (%)	0.02	0.24	0.72	0.72	0.09	0.73	0.79	2.36	2.33		2.49
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	Orientation			
	AITR	1392	ASU1	OHC1	MH	RTD	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-OHC1-MH-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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHC1-A-MH1-RTD-1	12.0050	1.5080	0.1338	0.0056	0.2503	0.6261	5.8685	6.0248	1.8702	9329.00	46.22	LGM	46.87
AITR1392-ASU1-OHC1-A-MH1-RTD-2	12.0047	1.5075	0.1357	0.0057	0.2511	0.6248	5.8685	6.0036	1.8500	9573.00	46.78	LGM	48.11
AITR1392-ASU1-OHC1-A-MH1-RTD-3	12.0049	1.5069	0.1338	0.0056	0.2511	0.6275	5.8695	6.0013	1.8767	8852.00	43.90	LGM	44.50
AITR1392-ASU1-OHC1-A-MH1-RTD-4	12.0044	1.5068	0.1344	0.0056	0.2507	0.6256	5.8675	6.0104	1.8658	NT			
AITR1392-ASU1-OHC1-A-MH2-RTD-1	12.0045	1.5033	0.1336	0.0056	0.2510	0.6243	5.871	5.9891	1.8792	9233.00	45.98	LGM	46.53
AITR1392-ASU1-OHC1-A-MH2-RTD-2	12.0053	1.5071	0.1356	0.0056	0.2511	0.6271	5.8685	6.0019	1.8522	8856.00	43.35	LGM	44.52
AITR1392-ASU1-OHC1-A-MH2-RTD-3	12.0054	1.5074	0.1338	0.0056	0.2512	0.6298	5.87	6.0007	1.8779	8892.00	44.10	MGM	44.69
AITR1392-ASU1-OHC1-A-MH2-RTD-4	12.0052	1.5070	0.1336	0.0056	0.2503	0.6277	5.8715	6.0209	1.8735	NT			
AITR1392-ASU1-OHC1-B-MH1-RTD-1	12.0044	1.4993	0.1272	0.0053	0.2507	0.6202	5.8795	5.9806	1.9704	8464.00	44.37	LGM	42.77
AITR1392-ASU1-OHC1-B-MH1-RTD-2	12.0045	1.4984	0.1271	0.0053	0.2515	0.6232	5.879	5.9577	1.9782	8345.00	43.81	LGM	42.19
AITR1392-ASU1-OHC1-B-MH1-RTD-3	12.0054	1.4995	0.1293	0.0054	0.2511	0.6185	5.8775	5.9717	1.9420	8706.00	44.90	LGM	43.98
AITR1392-ASU1-OHC1-B-MH1-RTD-4	11.9985	1.4978	0.1279	0.0053	0.2512	0.6235	5.8725	5.9627	1.9635	NT			
AITR1392-ASU1-OHC1-B-MH2-RTD-1	12.0062	1.5081	0.1349	0.0056	0.2510	0.6266	5.877	6.0085	1.8611	8590.00	42.23	LGM	43.15
AITR1392-ASU1-OHC1-B-MH2-RTD-2	12.0065	1.5082	0.1358	0.0057	0.2503	0.6290	5.872	6.0254	1.8427	8536.00	41.67	LGM	42.88
AITR1392-ASU1-OHC1-B-MH2-RTD-3	12.0065	1.5079	0.1358	0.0057	0.2515	0.6278	5.8695	5.9956	1.8520	8960.00	43.76	LGM	45.02
AITR1392-ASU1-OHC1-B-MH2-RTD-4	12.0065	1.5079	0.1343	0.0056	0.2515	0.6282	5.875	5.9955	1.8731	NT			
AITR1392-ASU1-OHC1-C-MH1-RTD-1	12.0055	1.5047	0.1308	0.0054	0.2508	0.6241	5.867	5.9997	1.9179	8434.00	42.86	LGM	42.46
AITR1392-ASU1-OHC1-C-MH1-RTD-2	12.0059	1.5052	0.1307	0.0054	0.2512	0.6258	5.869	5.9919	1.9224	7985.00	40.60	MGM	40.19
AITR1392-ASU1-OHC1-C-MH1-RTD-3	12.0059	1.5054	0.1307	0.0054	0.2506	0.6281	5.8685	6.0073	1.9174	8628.00	43.85	LGM	43.42
AITR1392-ASU1-OHC1-C-MH1-RTD-4	12.0055	1.5067	0.1299	0.0054	0.2511	0.6260	5.87	6.0004	1.9325	NT			
AITR1392-ASU1-OHC1-C-MH2-RTD-1	12.0057	1.5045	0.1297	0.0054	0.2511	0.6235	5.868	5.9918	1.9360	8210.00	42.07	LGM	41.34
AITR1392-ASU1-OHC1-C-MH2-RTD-2	12.0055	1.5056	0.1296	0.0054	0.2510	0.6268	5.871	5.9985	1.9372	8430.00	43.21	LGM	42.42
AITR1392-ASU1-OHC1-C-MH2-RTD-3	12.0056	1.5069	0.1286	0.0054	0.2512	0.6273	5.8695	5.9988	1.9533	8483.00	43.77	LGM	42.65
AITR1392-ASU1-OHC1-C-MH2-RTD-4	12.0063	1.5060	0.1284	0.0053	0.2511	0.6291	5.871	5.9975	1.9561	NT			
Minimum	11.9985	1.4978	0.1271	0.0053	0.2503	0.6185	5.8670	5.9577	1.8427	7985.0000	40.6000		40.1899
Maximum	12.0065	1.5082	0.1358	0.0057	0.2515	0.6298	5.8795	6.0254	1.9782	9573.0000	46.7847		48.1079
Average	12.0052	1.5053	0.1319	0.0055	0.2510	0.6259	5.8713	5.9973	1.9042	8694.7778	43.7472		43.7596
Standard Deviation	0.0016	0.0032	0.0030	0.0001	0.0004	0.0027	0.0037	0.0167	0.0438	403.0238	1.5868		1.9983
Coefficient of Variation (%)	0.01	0.21	2.26	2.26	0.14	0.44	0.06	0.28	2.30	4.64	3.63		4.57
No. Specimens	24	24	24	24	24	24	24	24	24	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	Orientation			
	AITR	1392	ASU1	OHC1	MH	ETW	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-OHC1-MH-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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHC1-A-MH1-ETW-1	11.9984	1.5008	0.1340	0.0056	0.2512	0.6255	5.8655	5.9747	1.8751	7904.00	39.31	LGM	39.90
AITR1392-ASU1-OHC1-A-MH1-ETW-2	11.9986	1.5065	0.1345	0.0056	0.2509	0.6266	5.872	6.0044	1.8659	7024.00	34.67	LGM	35.32
AITR1392-ASU1-OHC1-A-MH1-ETW-3	11.9989	1.5072	0.1337	0.0056	0.2511	0.6276	5.87	6.0023	1.8786	7376.00	36.61	LGM	37.08
AITR1392-ASU1-OHC1-A-MH1-ETW-4	11.9989	1.5077	0.1341	0.0056	0.2512	0.6282	5.869	6.0019	1.8732	NT			
AITR1392-ASU1-OHC1-A-MH2-ETW-1	11.9987	1.5035	0.1345	0.0056	0.2505	0.6268	5.8695	6.0020	1.8620	7558.00	37.37	LGM	38.08
AITR1392-ASU1-OHC1-A-MH2-ETW-2	11.9989	1.5053	0.1338	0.0056	0.2510	0.6275	5.869	5.9973	1.8764	7748.00	38.48	LGM	38.99
AITR1392-ASU1-OHC1-A-MH2-ETW-3	11.9995	1.5075	0.1343	0.0056	0.2503	0.6276	5.87	6.0228	1.8637	7676.00	37.91	LGM	38.57
AITR1392-ASU1-OHC1-A-MH2-ETW-4	11.9988	1.5070	0.1359	0.0057	0.2509	0.6308	5.8715	6.0064	1.8467	NT			
Minimum	11.9984	1.5008	0.1337	0.0056	0.2503	0.6255	5.8655	5.9747	1.8467	7024.0000	34.6737		35.3217
Maximum	11.9995	1.5077	0.1359	0.0057	0.2512	0.6308	5.8720	6.0228	1.8786	7904.0000	39.3113		39.8970
Average	11.9988	1.5057	0.1343	0.0056	0.2509	0.6276	5.8696	6.0015	1.8677	7547.6667	37.3926		37.9907
Standard Deviation	0.0003	0.0024	0.0007	0.0000	0.0003	0.0015	0.0020	0.0132	0.0105	312.2113	1.6206		1.6093
Coefficient of Variation (%)	0.00	0.16	0.52	0.52	0.13	0.25	0.03	0.22	0.56	4.14	4.33		4.24
No. Specimens	8	8	8	8	8	8	8	8	8	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	Orientation			
	AITR	1392	ASU1	OHC1	MH	ETW2	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-OHC1-MH-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	Failure Mode	**Normalized** Ultimate Strength, ksi
AITR1392-ASU1-OHC1-A-MH1-ETW2-1	12.0055	1.5073	0.1344	0.0056	0.2505	0.6271	5.866	6.0173	1.8638	7101.00	35.05	LGM	35.69
AITR1392-ASU1-OHC1-A-MH1-ETW2-2	12.0059	1.5073	0.1343	0.0056	0.2510	0.6286	5.8685	6.0053	1.8685	7120.00	35.16	LGM	35.78
AITR1392-ASU1-OHC1-A-MH1-ETW2-3	12.0059	1.5058	0.1340	0.0056	0.2510	0.6271	5.8695	5.9993	1.8736	7514.00	37.25	LGM	37.80
AITR1392-ASU1-OHC1-A-MH1-ETW2-4	12.0053	1.5072	0.1342	0.0056	0.2506	0.6280	5.8675	6.0142	1.8678	NT			
AITR1392-ASU1-OHC1-A-MH2-ETW2-1	12.0063	1.5070	0.1338	0.0056	0.2502	0.6268	5.8675	6.0232	1.8704	6952.00	34.49	LGM	34.95
AITR1392-ASU1-OHC1-A-MH2-ETW2-2	12.0061	1.5050	0.1340	0.0056	0.2511	0.6271	5.869	5.9936	1.8739	7185.00	35.63	LGM	36.17
AITR1392-ASU1-OHC1-A-MH2-ETW2-3	12.0063	1.5067	0.1335	0.0056	0.2509	0.6281	5.8715	6.0050	1.8799	7255.00	36.08	LGM	36.48
AITR1392-ASU1-OHC1-A-MH2-ETW2-4	12.0062	1.5070	0.1341	0.0056	0.2507	0.6290	5.8695	6.0112	1.8695	NT			
AITR1392-ASU1-OHC1-B-MH1-ETW2-1	12.0086	1.4987	0.1287	0.0054	0.2515	0.6212	5.878	5.9589	1.9547	6806.00	35.30	LGM	34.40
AITR1392-ASU1-OHC1-B-MH1-ETW2-2	12.0081	1.4987	0.1286	0.0054	0.2509	0.6206	5.87	5.9732	1.9505	6910.00	35.84	LGM	34.93
AITR1392-ASU1-OHC1-B-MH1-ETW2-3	12.0071	1.4988	0.1294	0.0054	0.2514	0.6215	5.873	5.9619	1.9433	6376.00	32.88	LGM	32.23
AITR1392-ASU1-OHC1-B-MH1-ETW2-4	12.0069	1.4977	0.1288	0.0054	0.2507	0.6200	5.87	5.9739	1.9464	NT			
AITR1392-ASU1-OHC1-B-MH2-ETW2-1	12.0098	1.5075	0.1366	0.0057	0.2508	0.6273	5.8665	6.0108	1.8360	6631.00	32.20	LGM	33.32
AITR1392-ASU1-OHC1-B-MH2-ETW2-2	12.0080	1.5073	0.1352	0.0056	0.2514	0.6285	5.8755	5.9958	1.8595	6916.00	33.94	LGM	34.76
AITR1392-ASU1-OHC1-B-MH2-ETW2-3	12.0077	1.5070	0.1354	0.0056	0.2500	0.6263	5.87	6.0280	1.8464	6142.00	30.10	LGM	30.88
AITR1392-ASU1-OHC1-B-MH2-ETW2-4	12.0078	1.5072	0.1366	0.0057	0.2513	0.6285	5.8695	5.9975	1.8392	NT			
AITR1392-ASU1-OHC1-C-MH1-ETW2-1	12.0054	1.5067	0.1321	0.0055	0.2511	0.6257	5.873	6.0003	1.9008	6910.00	34.72	LGM	34.74
AITR1392-ASU1-OHC1-C-MH1-ETW2-2	12.0062	1.5062	0.1316	0.0055	0.2512	0.6289	5.8705	5.9959	1.9093	6595.00	33.28	LGM	33.17
AITR1392-ASU1-OHC1-C-MH1-ETW2-3	12.0063	1.5057	0.1306	0.0054	0.2513	0.6290	5.8695	5.9915	1.9242	6539.00	33.25	LGM	32.90
AITR1392-ASU1-OHC1-C-MH1-ETW2-4	12.0057	1.5047	0.1316	0.0055	0.2512	0.6272	5.8705	5.9899	1.9083	NT			
AITR1392-ASU1-OHC1-C-MH2-ETW2-1	12.0054	1.5068	0.1300	0.0054	0.2510	0.6261	5.872	6.0033	1.9308	6924.00	35.35	LGM	34.81
AITR1392-ASU1-OHC1-C-MH2-ETW2-2	12.0061	1.5073	0.1302	0.0054	0.2509	0.6281	5.8695	6.0077	1.9265	6983.00	35.57	LGM	35.10
AITR1392-ASU1-OHC1-C-MH2-ETW2-3	12.0061	1.5078	0.1301	0.0054	0.2512	0.6246	5.8685	6.0025	1.9313	6800.00	34.67	LGM	34.17
AITR1392-ASU1-OHC1-C-MH2-ETW2-4	12.0061	1.5057	0.1300	0.0054	0.2512	0.6245	5.8715	5.9939	1.9328	NT			
Minimum	12.0053	1.4977	0.1286	0.0054	0.2500	0.6200	5.8660	5.9589	1.8360	6142.0000	30.1008		30.8761
Maximum	12.0098	1.5078	0.1366	0.0057	0.2515	0.6290	5.8780	6.0280	1.9547	7514.0000	37.2475		37.8025
Average	12.0066	1.5053	0.1324	0.0055	0.2510	0.6262	5.8703	5.9981	1.8961	6869.9444	34.4867		34.5711
Standard Deviation	0.0011	0.0032	0.0026	0.0001	0.0004	0.0028	0.0027	0.0174	0.0378	328.1943	1.6636		1.6390
Coefficient of Variation (%)	0.01	0.21	1.93	1.93	0.15	0.44	0.05	0.29	1.99	4.78	4.82		4.74
No. Specimens	24	24	24	24	24	24	24	24	24	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	Orientation			
	AITR	1392	ASU1	OHC2	MH	RTD	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-OHC2-MH-RTD

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

Test Type: Open-Hole Compression Layup 2 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-OHC2-A-MH1-RTD-1	12.0061	1.5083	0.1118	0.0056	0.2512	0.6245	5.8685	6.0044	2.2462	5806.00	34.42	MGM	34.99
AITR1392-ASU1-OHC2-A-MH1-RTD-2	12.0063	1.5084	0.1115	0.0056	0.2514	0.6246	5.8675	6.0000	2.2540	5923.00	35.21	AGM	35.70
AITR1392-ASU1-OHC2-A-MH1-RTD-3	12.0057	1.5014	0.1124	0.0056	0.2513	0.6181	5.869	5.9745	2.2364	6105.00	36.19	MGM	36.97
AITR1392-ASU1-OHC2-A-MH1-RTD-4					0.0000					NT			
AITR1392-ASU1-OHC2-A-MH2-RTD-1	12.0053	1.5092	0.1117	0.0056	0.2515	0.6261	5.871	6.0008	2.2522	6009.00	35.66	MGM	36.20
AITR1392-ASU1-OHC2-A-MH2-RTD-2	12.0053	1.5091	0.1112	0.0056	0.2508	0.6239	5.869	6.0173	2.2554	6240.00	37.18	MGM	37.59
AITR1392-ASU1-OHC2-A-MH2-RTD-3	12.0060	1.5095	0.1120	0.0056	0.2515	0.6281	5.8685	6.0021	2.2462	6055.00	35.82	MGM	36.47
AITR1392-ASU1-OHC2-A-MH2-RTD-4	12.0056	1.5099	0.1116	0.0056	0.2513	0.6255	5.868	6.0082	2.2518	NT			
Minimum	12.0053	1.5014	0.1112	0.0056	0.0000	0.6181	5.8675	5.9745	2.2364	5806.0000	34.4206		34.9942
Maximum	12.0063	1.5099	0.1124	0.0056	0.2515	0.6281	5.8710	6.0173	2.2554	6240.0000	37.1837		37.5893
Average	12.0057	1.5080	0.1117	0.0056	0.2199	0.6244	5.8688	6.0010	2.2489	6023.0000	35.7464		36.3179
Standard Deviation	0.0004	0.0030	0.0004	0.0000	0.0888	0.0031	0.0011	0.0131	0.0066	149.7478	0.9299		0.9176
Coefficient of Variation (%)	0.00	0.20	0.33	0.33	40.41	0.50	0.02	0.22	0.29	2.49	2.60		2.53
No. Specimens	7	7	7	7	8	7	7	7	7	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	Orientation			
	AITR	1392	ASU1	OHC2	MH	ETW2	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-OHC2-MH-ETW2

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

Test Type: Open-Hole Compression Layup 2 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-OHC2-A-MH1-ETW2-1	11.9979	1.5043	0.1113	0.0056	0.2510	0.6215	5.8685	5.9934	2.2552	4240.00	25.32	AGM	25.62
AITR1392-ASU1-OHC2-A-MH1-ETW2-2	12.0029	1.5055	0.1131	0.0057	0.2511	0.6235	5.8695	5.9956	2.2202	4688.00	27.53	AGM	28.31
AITR1392-ASU1-OHC2-A-MH1-ETW2-3	12.0000	1.5067	0.1119	0.0056	0.2513	0.6235	5.87	5.9955	2.2451	4631.00	27.46	AGM	27.94
AITR1392-ASU1-OHC2-A-MH1-ETW2-4	12.0023	1.5038	0.1125	0.0056	0.2508	0.6215	5.87	5.9961	2.2300	NT			
AITR1392-ASU1-OHC2-A-MH2-ETW2-1	11.9998	1.5062	0.1113	0.0056	0.2512	0.6230	5.8685	5.9959	2.2563	4807.00	28.67	AGM	29.01
AITR1392-ASU1-OHC2-A-MH2-ETW2-2	12.0000	1.5060	0.1123	0.0056	0.2512	0.6230	5.8655	5.9952	2.2375	4705.00	27.83	AGM	28.40
AITR1392-ASU1-OHC2-A-MH2-ETW2-3	11.9996	1.5055	0.1113	0.0056	0.2513	0.6220	5.8685	5.9908	2.2585	4498.00	26.85	AGM	27.16
AITR1392-ASU1-OHC2-A-MH2-ETW2-4	11.9996	1.5065	0.1124	0.0056	0.2507	0.6235	5.874	6.0092	2.2311	NT			
AITR1392-ASU1-OHC2-B-MH1-ETW2-1	12.0043	1.5052	0.1098	0.0055	0.2511	0.6235	5.868	5.9943	2.2869	4460.00	26.99	AGM	26.94
AITR1392-ASU1-OHC2-B-MH1-ETW2-2	12.0045	1.5054	0.1104	0.0055	0.2509	0.6210	5.868	6.0000	2.2726	4339.00	26.11	AGM	26.20
AITR1392-ASU1-OHC2-B-MH1-ETW2-3	12.0039	1.5062	0.1098	0.0055	0.2504	0.6265	5.867	6.0150	2.2809	4495.00	27.18	AGM	27.13
AITR1392-ASU1-OHC2-B-MH1-ETW2-4	12.0049	1.5057	0.1093	0.0055	0.2512	0.6220	5.8645	5.9940	2.2990	NT			
AITR1392-ASU1-OHC2-B-MH2-ETW2-1	12.0045	1.5061	0.1104	0.0055	0.2525	0.6280	5.8765	5.9646	2.2864	4559.00	27.41	AGM	27.52
AITR1392-ASU1-OHC2-B-MH2-ETW2-2	12.0050	1.5073	0.1091	0.0055	0.2519	0.6225	5.869	5.9836	2.3096	4484.00	27.28	AGM	27.04
AITR1392-ASU1-OHC2-B-MH2-ETW2-3	12.0011	1.5072	0.1096	0.0055	0.2513	0.6285	5.8665	5.9977	2.2929	4692.00	28.40	AGM	28.30
AITR1392-ASU1-OHC2-B-MH2-ETW2-4	12.0043	1.5069	0.1099	0.0055	0.2522	0.6250	5.872	5.9750	2.2945	NT			
AITR1392-ASU1-OHC2-C-MH1-ETW2-1	12.0050	1.5046	0.1065	0.0053	0.2514	0.6295	5.8715	5.9850	2.3617	4561.00	28.48	AGM	27.56
AITR1392-ASU1-OHC2-C-MH1-ETW2-2	12.0058	1.5043	0.1066	0.0053	0.2510	0.6235	5.8705	5.9934	2.3542	4546.00	28.34	AGM	27.47
AITR1392-ASU1-OHC2-C-MH1-ETW2-3	12.0058	1.5061	0.1053	0.0053	0.2515	0.6205	5.87	5.9883	2.3880	4371.00	27.56	AGM	26.38
AITR1392-ASU1-OHC2-C-MH1-ETW2-4	12.0052	1.5047	0.1064	0.0053	0.2514	0.6290	5.8715	5.9854	2.3628	NT			
AITR1392-ASU1-OHC2-C-MH2-ETW2-1	12.0044	1.5052	0.1080	0.0054	0.2512	0.6260	5.8675	5.9920	2.3259	4282.00	26.34	AGM	25.86
AITR1392-ASU1-OHC2-C-MH2-ETW2-2	12.0044	1.5065	0.1064	0.0053	0.2511	0.6290	5.866	5.9996	2.3603	4535.00	28.30	AGM	27.37
AITR1392-ASU1-OHC2-C-MH2-ETW2-3	12.0044	1.5058	0.1071	0.0054	0.2512	0.6285	5.866	5.9943	2.3466	4519.00	28.03	AGM	27.28
AITR1392-ASU1-OHC2-C-MH2-ETW2-4	12.0042	1.5062	0.1068	0.0053	0.2509	0.6250	5.865	6.0031	2.3496	NT			
Minimum	11.9979	1.5038	0.1053	0.0053	0.2504	0.6205	5.8645	5.9646	2.2202	4240.0000	25.3237		25.6229
Maximum	12.0058	1.5073	0.1131	0.0057	0.2525	0.6295	5.8765	6.0150	2.3880	4807.0000	28.6666		29.0141
Average	12.0031	1.5057	0.1095	0.0055	0.2512	0.6246	5.8689	5.9932	2.2961	4522.8889	27.4490		27.3061
Standard Deviation	0.0024	0.0009	0.0023	0.0001	0.0005	0.0029	0.0029	0.0101	0.0499	150.8189	0.8974		0.9041
Coefficient of Variation (%)	0.02	0.06	2.13	2.13	0.18	0.46	0.05	0.17	2.17	3.33	3.27		3.31
No. Specimens	24	24	24	24	24	24	24	24	24	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	Orientation			
	AITR	1392	ASU1	OHC3	MH	RTD	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-OHC3-MH-RTD

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

Test Type: Open-Hole Compression Layup 3 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-OHC3-A-MH1-RTD-1	12.0067	1.5088	0.1113	0.0056	0.2507	0.6278	5.864	6.0182	2.2518	8386.00	49.92	LGM	50.53
AITR1392-ASU1-OHC3-A-MH1-RTD-2	12.0070	1.5090	0.1125	0.0056	0.2509	0.6281	5.8655	6.0142	2.2309	8860.00	52.21	LGM	53.38
AITR1392-ASU1-OHC3-A-MH1-RTD-3	12.0068	1.5086	0.1118	0.0056	0.2515	0.6277	5.8665	5.9984	2.2489	9031.00	53.53	MGM	54.42
AITR1392-ASU1-OHC3-A-MH1-RTD-4	12.0070	1.5075	0.1108	0.0055	0.2510	0.6218	5.8655	6.0058	2.2653	9168.00	54.89	MGM	55.29
AITR1392-ASU1-OHC3-A-MH2-RTD-1	12.0067	1.5076	0.1096	0.0055	0.2512	0.6271	5.868	6.0015	2.2927	9886.00	59.85	MGM	59.61
AITR1392-ASU1-OHC3-A-MH2-RTD-2	12.0070	1.5074	0.1101	0.0055	0.2512	0.6270	5.864	6.0008	2.2823	10259.00	61.83	MGM	61.87
AITR1392-ASU1-OHC3-A-MH2-RTD-3	12.0069	1.5079	0.1102	0.0055	0.2510	0.6276	5.8665	6.0074	2.2777	9501.00	57.18	MGM	57.28
AITR1392-ASU1-OHC3-A-MH2-RTD-4					0.0000					NT			
Minimum	12.0067	1.5074	0.1096	0.0055	0.0000	0.6218	5.8640	5.9984	2.2309	8386.0000	49.9238		50.5289
Maximum	12.0070	1.5090	0.1125	0.0056	0.2515	0.6281	5.8680	6.0182	2.2927	10259.0000	61.8331		61.8705
Average	12.0069	1.5081	0.1109	0.0055	0.2197	0.6267	5.8657	6.0066	2.2642	9298.7143	55.6300		56.0547
Standard Deviation	0.0001	0.0007	0.0010	0.0001	0.0888	0.0022	0.0014	0.0073	0.0217	635.3801	4.2411		3.8504
Coefficient of Variation (%)	0.00	0.04	0.94	0.94	40.41	0.35	0.02	0.12	0.96	6.83	7.62		6.87
No. Specimens	7	7	7	7	8	7	7	7	7	7	7		7

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	Orientation			
	AITR	1392	ASU1	OHC3	MH	ETW2	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-OHC3-MH-ETW2

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

Test Type: Open-Hole Compression Layup 3 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-OHC3-A-MH1-ETW2-1	12.0061	1.5078	0.1114	0.0056	0.2506	0.6265	5.8795	6.0169	2.2496	7986.00	47.54	LGM	48.15
AITR1392-ASU1-OHC3-A-MH1-ETW2-2	12.0058	1.5070	0.1109	0.0055	0.2514	0.6250	5.879	5.9944	2.2669	7240.00	43.32	LGM	43.67
AITR1392-ASU1-OHC3-A-MH1-ETW2-3	12.0058	1.5077	0.1110	0.0055	0.2513	0.6265	5.8795	5.9995	2.2646	7755.00	46.35	LGM	46.76
AITR1392-ASU1-OHC3-A-MH1-ETW2-4	12.0057	1.5078	0.1112	0.0056	0.2503	0.6270	5.8865	6.0241	2.2502	NT			
AITR1392-ASU1-OHC3-A-MH2-ETW2-1	12.0053	1.5073	0.1113	0.0056	0.2514	0.6255	5.881	5.9958	2.2594	7933.00	47.30	LGM	47.84
AITR1392-ASU1-OHC3-A-MH2-ETW2-2	12.0058	1.5058	0.1114	0.0056	0.2504	0.6275	5.8815	6.0137	2.2471	6964.00	41.50	LGM	42.04
AITR1392-ASU1-OHC3-A-MH2-ETW2-3	12.0052	1.5068	0.1104	0.0055	0.2516	0.6225	5.8795	5.9890	2.2797	7000.00	42.09	LGM	42.23
AITR1392-ASU1-OHC3-A-MH2-ETW2-4	12.0058	1.5065	0.1103	0.0055	0.2508	0.6245	5.877	6.0068	2.2745	NT			
AITR1392-ASU1-OHC3-B-MH1-ETW2-1	12.0047	1.5026	0.1076	0.0054	0.2512	0.6210	5.8675	5.9816	2.3353	7789.00	48.19	LGM	47.13
AITR1392-ASU1-OHC3-B-MH1-ETW2-2	12.0051	1.5058	0.1070	0.0054	0.2509	0.6210	5.866	6.0015	2.3441	7823.00	48.54	LGM	47.23
AITR1392-ASU1-OHC3-B-MH1-ETW2-3	12.0051	1.5059	0.1067	0.0053	0.2511	0.6230	5.867	5.9973	2.3526	8047.00	50.06	LGM	48.58
AITR1392-ASU1-OHC3-B-MH1-ETW2-4	12.0052	1.5055	0.1088	0.0054	0.2510	0.6215	5.868	5.9981	2.3073	NT			
AITR1392-ASU1-OHC3-B-MH2-ETW2-1	12.0034	1.5069	0.1085	0.0054	0.2511	0.6260	5.8665	6.0013	2.3139	7787.00	47.62	LGM	46.98
AITR1392-ASU1-OHC3-B-MH2-ETW2-2	12.0034	1.5083	0.1094	0.0055	0.2510	0.6240	5.866	6.0093	2.2936	7729.00	46.82	LGM	46.58
AITR1392-ASU1-OHC3-B-MH2-ETW2-3	12.0044	1.5080	0.1079	0.0054	0.2510	0.6220	5.867	6.0080	2.3269	7472.00	45.94	LGM	45.04
AITR1392-ASU1-OHC3-B-MH2-ETW2-4	12.0033	1.5080	0.1077	0.0054	0.2512	0.6240	5.864	6.0031	2.3320	NT			
AITR1392-ASU1-OHC3-C-MH1-ETW2-1	12.0045	1.5076	0.1044	0.0052	0.2513	0.6225	5.8705	5.9993	2.4075	7708.00	48.98	LGM	46.48
AITR1392-ASU1-OHC3-C-MH1-ETW2-2	12.0044	1.5069	0.1070	0.0053	0.2519	0.6220	5.8795	5.9820	2.3549	7424.00	46.06	LGM	44.79
AITR1392-ASU1-OHC3-C-MH1-ETW2-3	12.0038	1.5085	0.1049	0.0052	0.2516	0.6250	5.868	5.9956	2.3981	7461.00	47.14	LGM	44.96
AITR1392-ASU1-OHC3-C-MH1-ETW2-4	12.0044	1.5048	0.1064	0.0053	0.2514	0.6210	5.87	5.9855	2.3628	NT			
AITR1392-ASU1-OHC3-C-MH2-ETW2-1	12.0032	1.5069	0.1057	0.0053	0.2526	0.6230	5.867	5.9657	2.3894	7922.00	49.73	LGM	47.79
AITR1392-ASU1-OHC3-C-MH2-ETW2-2	12.0040	1.5068	0.1063	0.0053	0.2517	0.6235	5.8695	5.9864	2.3671	7571.00	47.25	LGM	45.68
AITR1392-ASU1-OHC3-C-MH2-ETW2-3	12.0046	1.5079	0.1060	0.0053	0.2518	0.6220	5.8715	5.9885	2.3758	7828.00	48.98	LGM	47.19
AITR1392-ASU1-OHC3-C-MH2-ETW2-4	12.0043	1.5080	0.1057	0.0053	0.2528	0.6195	5.878	5.9653	2.3909	NT			
Minimum	12.0032	1.5026	0.1044	0.0052	0.2503	0.6195	5.8640	5.9653	2.2471	6964.0000	41.5018		42.0426
Maximum	12.0061	1.5085	0.1114	0.0056	0.2528	0.6275	5.8865	6.0241	2.4075	8047.0000	50.0643		48.5775
Average	12.0047	1.5069	0.1082	0.0054	0.2513	0.6236	5.8729	5.9962	2.3227	7635.5000	46.8572		46.0632
Standard Deviation	0.0009	0.0013	0.0023	0.0001	0.0006	0.0022	0.0066	0.0143	0.0524	318.7332	2.4167		1.9240
Coefficient of Variation (%)	0.01	0.09	2.11	2.11	0.23	0.35	0.11	0.24	2.26	4.17	5.16		4.18
No. Specimens	24	24	24	24	24	24	24	24	24	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	Orientation			
	AITR	1392	ASU1	UNT1	MH	CTD	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNT1-MH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

Test Type: Quasi 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-UNT1-A-MH1-CTD-1	10.034	1.0090	0.1346	0.0056	14480.00	AWT	106.648	108.722	7.36	7.500	NT
AITR1392-ASU1-UNT1-A-MH1-CTD-2	10.036	1.0089	0.1338	0.0056	15680.00	AGM	116.156	117.740	7.42	7.522	NT
AITR1392-ASU1-UNT1-A-MH1-CTD-3	10.044	1.0086	0.1340	0.0056	14939.00	AGT	110.534	112.209	7.41	7.523	NT
AITR1392-ASU1-UNT1-A-MH1-CTD-4	10.033	1.0094	0.1350	0.0056	NT				NT		NT
AITR1392-ASU1-UNT1-A-MH2-CTD-1	10.045	1.0091	0.1355	0.0056	15369.00	AWT	112.402	115.382	6.97	7.154	NT
AITR1392-ASU1-UNT1-A-MH2-CTD-2	10.054	1.0089	0.1346	0.0056	15281.00	AWT/AWB	112.555	114.744	6.63	6.763	NT
AITR1392-ASU1-UNT1-A-MH2-CTD-3	10.061	1.0081	0.1352	0.0056	15630.00	AGB	114.706	117.458	6.88	7.044	NT
AITR1392-ASU1-UNT1-A-MH2-CTD-4	10.062	1.0079	0.1358	0.0057	NT				NT		NT
AITR1392-ASU1-UNT1-B-MH1-CTD-1	10.057	1.0091	0.1335	0.0056	14701.00	AWB	109.100	110.367	6.36	6.435	NT
AITR1392-ASU1-UNT1-B-MH1-CTD-2	10.058	1.0092	0.1326	0.0055	15161.00	AGB	113.269	113.813	6.92	6.952	NT
AITR1392-ASU1-UNT1-B-MH1-CTD-3	10.058	1.0082	0.1322	0.0055	15400.00	AGT	115.576	115.722	7.51	7.520	NT
AITR1392-ASU1-UNT1-B-MH1-CTD-4	10.060	1.0080	0.1311	0.0055	NT				NT		NT
AITR1392-ASU1-UNT1-B-MH2-CTD-1	10.057	1.0091	0.1365	0.0057	14488.00	AWT	105.153	108.764	6.93	7.164	NT
AITR1392-ASU1-UNT1-B-MH2-CTD-2	10.049	1.0067	0.1390	0.0058	15109.00	AGB	107.971	113.697	7.44	7.830	NT
AITR1392-ASU1-UNT1-B-MH2-CTD-3	10.059	1.0079	0.1368	0.0057	14876.00	AWT	107.864	111.814	6.64	6.878	NT
AITR1392-ASU1-UNT1-B-MH2-CTD-4	10.058	1.0083	0.1364	0.0057	NT				NT		NT
AITR1392-ASU1-UNT1-C-MH1-CTD-1	10.066	1.0073	0.1298	0.0054	15460.00	AWT	118.213	116.272	7.82	7.687	NT
AITR1392-ASU1-UNT1-C-MH1-CTD-2	10.062	1.0080	0.1288	0.0054	14769.00	AGM	113.752	110.995	8.34	8.135	NT
AITR1392-ASU1-UNT1-C-MH1-CTD-3	10.064	1.0073	0.1290	0.0054	14651.00	AGM	112.725	110.192	7.12	6.959	NT
AITR1392-ASU1-UNT1-C-MH1-CTD-4	10.061	1.0073	0.1300	0.0054	NT				NT		NT
AITR1392-ASU1-UNT1-C-MH2-CTD-1	10.064	1.0077	0.1305	0.0054	14605.00	AGM	111.061	109.798	7.33	7.250	NT
AITR1392-ASU1-UNT1-C-MH2-CTD-2	10.060	1.0072	0.1306	0.0054	15503.00	AWT/AWB	117.827	116.607	7.72	7.643	NT
AITR1392-ASU1-UNT1-C-MH2-CTD-3	10.065	1.0081	0.1297	0.0054	14911.00	AWT	114.045	112.058	7.61	7.476	NT
AITR1392-ASU1-UNT1-C-MH2-CTD-4	10.067	1.0072	0.1296	0.0054	NT				NT		NT
Minimum	10.0333	1.0067	0.1288	0.0054	14480.00		105.153	108.722	6.361	6.435	
Maximum	10.0666	1.0094	0.1390	0.0058	15680.00		118.213	117.740	8.337	8.135	
Average	10.0556	1.0082	0.1331	0.0055	15056.28		112.198	113.131	7.244	7.302	
Standard Deviation	0.0101	0.0008	0.0029	0.0001	395.56		3.753	2.983	0.487	0.422	
Coefficient of Variation (%)	0.10	0.08	2.19	2.19	2.63		3.34	2.64	6.72	5.78	
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	Orientation			
	AITR	1392	ASU1	UNT1	MH	RTD	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNT1-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

Test Type: Quasi Unnotched 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-ASU1-UNT1-A-MH1-RTD-1	10.037	1.0086	0.1342	0.0056	14195.00	LWT	104.903	106.624	6.81	6.926	NT
AITR1392-ASU1-UNT1-A-MH1-RTD-2	10.037	1.0076	0.1342	0.0056	12716.00	AWT	94.043	95.610	7.05	7.168	NT
AITR1392-ASU1-UNT1-A-MH1-RTD-3	10.035	1.0078	0.1343	0.0056	14040.00	AGT/LWB	103.711	105.544	7.01	7.131	NT
AITR1392-ASU1-UNT1-A-MH1-RTD-4	10.040	1.0083	0.1347	0.0056	15251.00	AWB	112.294	114.591	7.05	7.189	NT
AITR1392-ASU1-UNT1-A-MH2-RTD-1	10.058	1.0088	0.1357	0.0057	14537.00	AWB	106.165	109.168	6.90	7.091	NT
AITR1392-ASU1-UNT1-A-MH2-RTD-2	10.059	1.0089	0.1344	0.0056	15152.00	AGM	111.720	113.779	6.95	7.082	NT
AITR1392-ASU1-UNT1-A-MH2-RTD-3	10.058	1.0081	0.1347	0.0056	14597.00	AWT	107.519	109.691	7.09	7.235	NT
AITR1392-ASU1-UNT1-A-MH2-RTD-4	10.061	1.0083	0.1361	0.0057	15060.00	AGM/DWT	109.770	113.152	6.70	6.902	NT
AITR1392-ASU1-UNT1-B-MH1-RTD-1	10.059	1.0088	0.1325	0.0055	14940.00	AGB	111.747	112.198	6.84	6.872	NT
AITR1392-ASU1-UNT1-B-MH1-RTD-2	10.060	1.0085	0.1332	0.0056	14407.00	AGM	107.222	108.224	7.00	7.069	NT
AITR1392-ASU1-UNT1-B-MH1-RTD-3	10.058	1.0069	0.1329	0.0055	14249.00	AGB/DGB/LWT	106.455	107.207	6.77	6.819	NT
AITR1392-ASU1-UNT1-B-MH1-RTD-4	10.060	1.0077	0.1322	0.0055	15072.00	AGM/AWT/AWB	113.163	113.306	7.00	7.011	NT
AITR1392-ASU1-UNT1-B-MH2-RTD-1	10.053	1.0091	0.1362	0.0057	15193.00	AGM	110.516	114.061	6.80	7.018	NT
AITR1392-ASU1-UNT1-B-MH2-RTD-2	10.058	1.0088	0.1371	0.0057	15090.00	AWT	109.128	113.317	6.74	7.002	NT
AITR1392-ASU1-UNT1-B-MH2-RTD-3	10.057	1.0075	0.1356	0.0057	FM	PPED/NO FAILU			6.64	6.823	NT
AITR1392-ASU1-UNT1-B-MH2-RTD-4	10.048	1.0089	0.1351	0.0056	FM	PPED/NO FAILU			GE		NT
AITR1392-ASU1-UNT1-C-MH1-RTD-1	10.063	1.0064	0.1310	0.0055	14657.00	AGM/DWT	111.146	110.332	6.99	6.941	NT
AITR1392-ASU1-UNT1-C-MH1-RTD-2	10.064	1.0071	0.1294	0.0054	15198.00	AGM/DWT	116.652	114.325	7.14	6.998	NT
AITR1392-ASU1-UNT1-C-MH1-RTD-3	10.066	1.0072	0.1301	0.0054	14112.00	AWT	107.691	106.141	6.99	6.887	NT
AITR1392-ASU1-UNT1-C-MH1-RTD-4	10.063	1.0063	0.1306	0.0054	FM	PPED/NO FAILU			6.92	6.849	NT
AITR1392-ASU1-UNT1-C-MH2-RTD-1	10.059	1.0070	0.1289	0.0054	14755.00	DWB/LWT	113.673	111.003	7.23	7.057	NT
AITR1392-ASU1-UNT1-C-MH2-RTD-2	10.063	1.0074	0.1295	0.0054	14061.00	AWT	107.782	105.740	7.05	6.915	NT
AITR1392-ASU1-UNT1-C-MH2-RTD-3	10.064	1.0064	0.1307	0.0054	14092.00	AGT/DWB	107.130	106.075	7.00	6.932	NT
AITR1392-ASU1-UNT1-C-MH2-RTD-4	10.061	1.0064	0.1291	0.0054	14641.00	AGM	112.691	110.215	7.17	7.011	NT
Minimum	10.0352	1.0063	0.1289	0.0054	12716.00		94.043	95.610	6.642	6.819	
Maximum	10.0657	1.0091	0.1371	0.0057	15251.00		116.652	114.591	7.227	7.235	
Average	10.0559	1.0078	0.1330	0.0055	14572.14		108.815	109.538	6.950	6.997	
Standard Deviation	0.0092	0.0009	0.0025	0.0001	600.78		4.685	4.486	0.153	0.118	
Coefficient of Variation (%)	0.09	0.09	1.91	1.91	4.12		4.31	4.10	2.20	1.69	
No. Specimens	24	24	24	24	21		21	21	23	23	

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	Orientation			
	AITR	1392	ASU1	UNT1	MH	ETW2	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNT1-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

Test Type: Quasi Unnotched Tensile Condition: ETW2

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-ASU1-UNT1-A-MH1-ETW2-1	10.040	1.0085	0.1373	0.0057	12608.00	XWT	91.076	94.710	7.55	7.850	NT
AITR1392-ASU1-UNT1-A-MH1-ETW2-2	10.037	1.0085	0.1380	0.0058	12308.00	XWT	88.437	92.457	8.10	8.465	NT
AITR1392-ASU1-UNT1-A-MH1-ETW2-3	10.035	1.0043	0.1358	0.0057	13064.00	XGM	95.792	98.549	GE		NT
AITR1392-ASU1-UNT1-A-MH1-ETW2-4	10.038	1.0103	0.1392	0.0058	NT				NT		NT
AITR1392-ASU1-UNT1-A-MH2-ETW2-1	10.060	1.0102	0.1367	0.0057	13703.00	XGM	99.253	102.762	8.56	8.864	NT
AITR1392-ASU1-UNT1-A-MH2-ETW2-2	10.063	1.0099	0.1367	0.0057	13199.00	DWB/LGT	95.582	99.009	8.15	8.439	NT
AITR1392-ASU1-UNT1-A-MH2-ETW2-3	10.064	1.0087	0.1362	0.0057	14482.00	DGM/DAT	105.386	108.766	8.75	9.034	NT
AITR1392-ASU1-UNT1-A-MH2-ETW2-4	10.056	1.0101	0.1360	0.0057	NT				NT		NT
Minimum	10.0348	1.0043	0.1358	0.0057	12308.00		88.437	92.457	7.549	7.850	
Maximum	10.0635	1.0103	0.1392	0.0058	14482.00		105.386	108.766	8.753	9.034	
Average	10.0489	1.0088	0.1370	0.0057	13227.33		95.921	99.376	8.221	8.530	
Standard Deviation	0.0128	0.0020	0.0011	0.0000	781.88		6.005	5.833	0.467	0.458	
Coefficient of Variation (%)	0.13	0.20	0.84	0.84	5.91		6.26	5.87	5.68	5.37	
No. Specimens	8	8	8	8	6		6	6	5	5	

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	Orientation			
	AITR	1392	ASU1	UNT2	MH	CTD	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-UNT2-MH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Soft Unnotched 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-ASU1-UNT2-A-MH1-CTD-1	10.057	1.0030	0.1136	0.0057	7880.00	AWT	69.181	71.424	4.61	4.756	NT
AITR1392-ASU1-UNT2-A-MH1-CTD-2	10.064	1.0027	0.1140	0.0057	7501.00	AWB	65.642	68.010	4.71	4.875	NT
AITR1392-ASU1-UNT2-A-MH1-CTD-3	10.058	1.0023	0.1143	0.0057	7409.00	AWB	64.653	67.200	4.69	4.870	NT
AITR1392-ASU1-UNT2-A-MH1-CTD-4	10.061	1.0007	0.1143	0.0057	NT				NT		NT
AITR1392-ASU1-UNT2-A-MH2-CTD-1	10.032	1.0062	0.1117	0.0056	7635.00	AWT	67.954	68.984	3.75	3.803	NT
AITR1392-ASU1-UNT2-A-MH2-CTD-2	10.031	1.0070	0.1117	0.0056	8195.00	AWT	72.834	73.982	4.42	4.485	NT
AITR1392-ASU1-UNT2-A-MH2-CTD-3	10.038	1.0058	0.1122	0.0056	7535.00	AWT	66.750	68.105	4.84	4.940	NT
AITR1392-ASU1-UNT2-A-MH2-CTD-4	10.027	1.0062	0.1125	0.0056	NT				NT		NT
Minimum	10.0274	1.0007	0.1117	0.0056	7409.00		64.653	67.200	3.746	3.803	
Maximum	10.0637	1.0070	0.1143	0.0057	8195.00		72.834	73.982	4.842	4.940	
Average	10.0459	1.0042	0.1130	0.0057	7692.50		67.836	69.617	4.500	4.621	
Standard Deviation	0.0152	0.0023	0.0011	0.0001	294.22		2.930	2.586	0.395	0.432	
Coefficient of Variation (%)	0.15	0.23	1.00	1.00	3.82		4.32	3.71	8.78	9.36	
No. Specimens	8	8	8	8	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	Orientation			
	AITR	1392	ASU1	UNT2	MH	RTD	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-UNT2-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Soft 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-ASU1-UNT2-A-MH1-RTD-1	10.064	1.0032	0.1143	0.0057	7018.00	DGT	61.202	63.594	4.10	4.255	NT
AITR1392-ASU1-UNT2-A-MH1-RTD-2	10.065	1.0031	0.1138	0.0057	6833.00	DWT	59.841	61.926	4.19	4.334	NT
AITR1392-ASU1-UNT2-A-MH1-RTD-3	10.056	1.0027	0.1142	0.0057	6982.00	DWT	60.994	63.304	4.12	4.277	NT
AITR1392-ASU1-UNT2-A-MH1-RTD-4	10.060	1.0014	0.1139	0.0057	NT				NT		NT
AITR1392-ASU1-UNT2-A-MH2-RTD-1	10.041	1.0070	0.1117	0.0056	7365.00	DGB	65.477	66.489	4.30	4.362	NT
AITR1392-ASU1-UNT2-A-MH2-RTD-2	10.039	1.0060	0.1112	0.0056	6967.00	DGT	62.263	62.961	4.37	4.415	NT
AITR1392-ASU1-UNT2-A-MH2-RTD-3	10.030	1.0060	0.1115	0.0056	7286.00	DGB	64.956	65.841	4.37	4.427	NT
AITR1392-ASU1-UNT2-A-MH2-RTD-4	10.042	1.0064	0.1114	0.0056	NT				NT		NT
Minimum	10.0295	1.0014	0.1112	0.0056	6833.00		59.841	61.926	4.095	4.255	
Maximum	10.0653	1.0070	0.1143	0.0057	7365.00		65.477	66.489	4.367	4.427	
Average	10.0495	1.0045	0.1128	0.0056	7075.17		62.455	64.019	4.239	4.345	
Standard Deviation	0.0133	0.0021	0.0014	0.0001	205.30		2.279	1.767	0.121	0.070	
Coefficient of Variation (%)	0.13	0.21	1.24	1.24	2.90		3.65	2.76	2.85	1.62	
No. Specimens	8	8	8	8	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	Orientation			
	AITR	1392	ASU1	UNT2	MH	ETW2	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-UNT2-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Soft 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-ASU1-UNT2-A-MH1-ETW2-1	10.065	1.0043	0.1139	0.0057	5282.00	DGT	46.177	47.814	GE		NT
AITR1392-ASU1-UNT2-A-MH1-ETW2-2	10.064	1.0015	0.1139	0.0057	5394.00	DGM	47.286	48.963	GE		NT
AITR1392-ASU1-UNT2-A-MH1-ETW2-3	10.061	1.0037	0.1133	0.0057	5325.00	DWT	46.840	48.231	4.82	4.961	NT
AITR1392-ASU1-UNT2-A-MH1-ETW2-4	10.067	1.0047	0.1143	0.0057	NT				NT		NT
AITR1392-ASU1-UNT2-A-MH2-ETW2-1	10.043	0.9995	0.1121	0.0056	5195.00	DGM	46.350	47.249	4.80	4.896	NT
AITR1392-ASU1-UNT2-A-MH2-ETW2-2	10.042	1.0066	0.1129	0.0056	5119.00	DGT	45.059	46.233	4.79	4.911	NT
AITR1392-ASU1-UNT2-A-MH2-ETW2-3	10.044	0.9997	0.1118	0.0056	5030.00	DGM	45.019	45.743	4.34	4.409	NT
AITR1392-ASU1-UNT2-A-MH2-ETW2-4	10.035	1.0058	0.1121	0.0056	NT				NT		NT
Minimum	10.0347	0.9995	0.1118	0.0056	5030.00		45.019	45.743	4.339	4.409	
Maximum	10.0668	1.0066	0.1143	0.0057	5394.00		47.286	48.963	4.818	4.961	
Average	10.0527	1.0032	0.1130	0.0057	5224.17		46.122	47.372	4.687	4.794	
Standard Deviation	0.0129	0.0027	0.0010	0.0000	135.62		0.924	1.219	0.232	0.258	
Coefficient of Variation (%)	0.13	0.27	0.84	0.84	2.60		2.00	2.57	4.95	5.39	
No. Specimens	8	8	8	8	6		6	6	4	4	

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	Orientation			
	AITR	1392	ASU1	UNT3	MH	CTD	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-UNT3-MH-CTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Hard Unnotched 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-ASU1-UNT3-A-MH1-CTD-1	10.064	1.0079	0.1104	0.0055	18746.00	AAT/AAB	168.470	169.082	12.42	12.460	NT
AITR1392-ASU1-UNT3-A-MH1-CTD-2	10.064	1.0080	0.1120	0.0056	16526.00	AAT	146.378	149.039	11.10	11.302	NT
AITR1392-ASU1-UNT3-A-MH1-CTD-3	10.064	1.0083	0.1121	0.0056	16906.00	AAT	149.526	152.426	11.47	11.690	NT
AITR1392-ASU1-UNT3-A-MH1-CTD-4	10.061	1.0078	0.1125	0.0056	NT				NT		NT
AITR1392-ASU1-UNT3-A-MH2-CTD-1	10.036	1.0098	0.1121	0.0056	17192.00	AAT/DGB	151.920	154.774	10.78	10.982	NT
AITR1392-ASU1-UNT3-A-MH2-CTD-2	10.038	1.0097	0.1122	0.0056	18288.00	AAT/LAB	161.477	164.657	10.43	10.638	NT
AITR1392-ASU1-UNT3-A-MH2-CTD-3	10.041	1.0096	0.1121	0.0056	17739.00	AAB	156.697	159.736	10.74	10.946	NT
AITR1392-ASU1-UNT3-A-MH2-CTD-4	10.038	1.0099	0.1105	0.0055	NT				NT		NT
Minimum	10.0364	1.0078	0.1104	0.0055	16526.00		146.378	149.039	10.433	10.638	
Maximum	10.0643	1.0099	0.1125	0.0056	18746.00		168.470	169.082	12.415	12.460	
Average	10.0508	1.0089	0.1117	0.0056	17566.17		155.744	158.286	11.156	11.336	
Standard Deviation	0.0135	0.0009	0.0008	0.0000	848.61		8.207	7.635	0.711	0.656	
Coefficient of Variation (%)	0.13	0.09	0.72	0.72	4.83		5.27	4.82	6.37	5.79	
No. Specimens	8	8	8	8	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	Orientation			
	AITR	1392	ASU1	UNT3	MH	RTD	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-UNT3-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Hard 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-ASU1-UNT3-A-MH1-RTD-1	10.065	1.0082	0.1117	0.0056	18905.00	DWT/AAB	167.922	170.466	10.96	11.130	NT
AITR1392-ASU1-UNT3-A-MH1-RTD-2	10.059	1.0080	0.1109	0.0055	16779.00	AAT/AAB	150.093	151.321	10.63	10.712	NT
AITR1392-ASU1-UNT3-A-MH1-RTD-3	10.064	1.0086	0.1111	0.0056	18696.00	AAT/AAB/SGT	166.801	168.520	10.55	10.659	NT
AITR1392-ASU1-UNT3-A-MH1-RTD-4	10.063	1.0083	0.1115	0.0056	16954.00	AAT/SGT	150.807	152.864	10.61	10.756	NT
AITR1392-ASU1-UNT3-A-MH2-RTD-1	10.042	1.0098	0.1133	0.0057	17809.00	AAB/LAB	155.710	160.334	10.30	10.603	NT
AITR1392-ASU1-UNT3-A-MH2-RTD-2	10.044	1.0099	0.1118	0.0056	18595.00	DWB/AAT	164.748	167.394	10.74	10.914	NT
AITR1392-ASU1-UNT3-A-MH2-RTD-3	10.041	1.0094	0.1132	0.0057	18254.00	AAB/AAT/SGM	159.747	164.395	10.52	10.826	NT
AITR1392-ASU1-UNT3-A-MH2-RTD-4	10.039	1.0098	0.1132	0.0057	17519.00	AAT/AAB	153.209	157.713	10.69	11.000	NT
Minimum	10.0392	1.0080	0.1109	0.0055	16779.00		150.093	151.321	10.297	10.603	
Maximum	10.0650	1.0099	0.1133	0.0057	18905.00		167.922	170.466	10.964	11.130	
Average	10.0521	1.0090	0.1121	0.0056	17938.88		158.630	161.626	10.624	10.825	
Standard Deviation	0.0116	0.0008	0.0010	0.0000	805.77		7.209	7.236	0.191	0.180	
Coefficient of Variation (%)	0.12	0.08	0.88	0.88	4.49		4.54	4.48	1.80	1.66	
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	Orientation			
	AITR	1392	ASU1	UNT3	MH	ETW2	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-UNT3-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Hard 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-ASU1-UNT3-A-MH1-ETW2-1	10.066	1.0086	0.1132	0.0057	16016.00	DWB/DAT	140.314	144.354	12.86	13.231	NT
AITR1392-ASU1-UNT3-A-MH1-ETW2-2	10.069	1.0083	0.1123	0.0056	16931.00	DAT/DAB	149.475	152.646	GE		NT
AITR1392-ASU1-UNT3-A-MH1-ETW2-3	10.068	1.0081	0.1131	0.0057	16341.00	DGM/DWT	143.280	147.361	12.47	12.820	NT
AITR1392-ASU1-UNT3-A-MH1-ETW2-4	10.064	1.0088	0.1125	0.0056	NT				NT		NT
AITR1392-ASU1-UNT3-A-MH2-ETW2-1	10.002	1.0114	0.1138	0.0057	16635.00	DMV	144.577	149.528	12.35	12.772	NT
AITR1392-ASU1-UNT3-A-MH2-ETW2-2	10.045	1.0112	0.1142	0.0057	16132.00	DAT/DWB	139.660	145.035	12.51	12.992	NT
AITR1392-ASU1-UNT3-A-MH2-ETW2-3	10.034	1.0114	0.1115	0.0056	16858.00	DMV	149.528	151.522	GE		NT
AITR1392-ASU1-UNT3-A-MH2-ETW2-4	10.039	1.0118	0.1113	0.0056	NT				NT		NT
Minimum	10.0018	1.0081	0.1113	0.0056	16016.00		139.660	144.354	12.349	12.772	
Maximum	10.0694	1.0118	0.1142	0.0057	16931.00		149.528	152.646	12.861	13.231	
Average	10.0482	1.0100	0.1127	0.0056	16485.50		144.473	148.408	12.547	12.954	
Standard Deviation	0.0235	0.0016	0.0010	0.0001	381.01		4.301	3.401	0.220	0.208	
Coefficient of Variation (%)	0.23	0.16	0.91	0.91	2.31		2.98	2.29	1.76	1.60	
No. Specimens	8	8	8	8	6		6	6	4	4	

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	Orientation			
	AITR	1392	ASU1	UNC1	MH	RTD	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNC1-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

Test Type: Quasi Unnotched 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-ASU1-UNC1-A-MH1-RTD-1	5.504	0.5073	0.1351	0.0056	5725.00	BGT/BAT	83.538	85.500	NT		NT
AITR1392-ASU1-UNC1-A-MH1-RTD-2	5.504	0.5069	0.1332	0.0056	5379.00	BGM	79.652	80.396	6.39	6.454	0.304
AITR1392-ASU1-UNC1-A-MH1-RTD-3	5.504	0.5073	0.1331	0.0055	5665.00	BGM	83.878	84.598	6.26	6.315	0.321
AITR1392-ASU1-UNC1-A-MH1-RTD-4	5.503	0.5079	0.1353	0.0056	5224.00	BGM	76.025	77.925	6.14	6.298	0.296
AITR1392-ASU1-UNC1-A-MH2-RTD-1	5.505	0.5071	0.1339	0.0056	5284.00	BGM	77.839	78.940	6.34	6.427	0.340
AITR1392-ASU1-UNC1-A-MH2-RTD-2	5.503	0.5075	0.1330	0.0055	5325.00	BGM	78.877	79.484	6.36	6.409	0.306
AITR1392-ASU1-UNC1-A-MH2-RTD-3	5.504	0.5075	0.1339	0.0056	6034.00	BGM	88.767	90.067	6.52	6.610	0.000
AITR1392-ASU1-UNC1-A-MH2-RTD-4	5.504	0.5075	0.1343	0.0056	5034.00	BGM	73.845	75.150	6.07	6.175	0.331
AITR1392-ASU1-UNC1-B-MH1-RTD-1	5.506	0.5076	0.1307	0.0054	5093.00	BGM	76.743	76.006	6.32	6.256	0.315
AITR1392-ASU1-UNC1-B-MH1-RTD-2	5.506	0.5070	0.1317	0.0055	4983.00	BGM	74.646	74.458	6.22	6.207	0.301
AITR1392-ASU1-UNC1-B-MH1-RTD-3	5.506	0.5079	0.1315	0.0055	5185.00	BGM	77.652	77.339	6.37	6.341	0.313
AITR1392-ASU1-UNC1-B-MH1-RTD-4	5.506	0.5084	0.1285	0.0054	NT				NT		NT
AITR1392-ASU1-UNC1-B-MH2-RTD-1	5.507	0.5083	0.1286	0.0054	5249.00	BGT	80.316	78.227	6.56	6.386	0.319
AITR1392-ASU1-UNC1-B-MH2-RTD-2	5.506	0.5077	0.1296	0.0054	5053.00	BGM	76.781	75.404	6.57	6.455	0.321
AITR1392-ASU1-UNC1-B-MH2-RTD-3	5.507	0.5070	0.1280	0.0053	5210.00	BGM	80.288	77.855	6.04	5.857	0.294
AITR1392-ASU1-UNC1-B-MH2-RTD-4	5.501	0.5077	0.1290	0.0054	NT				NT		NT
AITR1392-ASU1-UNC1-C-MH1-RTD-1	5.506	0.5062	0.1297	0.0054	4716.00	BGT	71.831	70.579	6.47	6.361	0.339
AITR1392-ASU1-UNC1-C-MH1-RTD-2	5.507	0.5057	0.1298	0.0054	5180.00	BGM	78.890	77.595	6.12	6.020	0.313
AITR1392-ASU1-UNC1-C-MH1-RTD-3	5.507	0.5057	0.1295	0.0054	5099.00	BGM	77.876	76.382	6.52	6.399	0.322
AITR1392-ASU1-UNC1-C-MH1-RTD-4	5.507	0.5062	0.1287	0.0054	NT				NT		NT
AITR1392-ASU1-UNC1-C-MH2-RTD-1	5.505	0.5052	0.1276	0.0053	5627.00	BGM	87.290	84.380	6.50	6.286	0.298
AITR1392-ASU1-UNC1-C-MH2-RTD-2	5.506	0.5054	0.1286	0.0054	4931.00	BGM	75.888	73.914	6.25	6.090	0.279
AITR1392-ASU1-UNC1-C-MH2-RTD-3	5.506	0.5059	0.1281	0.0053	4772.00	BGM	73.616	71.460	6.31	6.123	0.309
AITR1392-ASU1-UNC1-C-MH2-RTD-4	5.505	0.5056	0.1278	0.0053	NT				NT		NT
Minimum	5.5009	0.5052	0.1276	0.0053	4716.00		71.831	70.579	6.040	5.857	0.0000
Maximum	5.5073	0.5084	0.1353	0.0056	6034.00		88.767	90.067	6.573	6.610	0.3400
Average	5.5052	0.5069	0.1308	0.0055	5238.40		78.712	78.283	6.334	6.288	0.2958
Standard Deviation	0.0015	0.0010	0.0026	0.0001	324.96		4.410	4.826	0.166	0.178	0.0733
Coefficient of Variation (%)	0.03	0.19	1.96	1.96	6.20		5.60	6.17	2.61	2.83	24.77
No. Specimens	24	24	24	24	20		20	20	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	Orientation			
	AITR	1392	ASU1	UNC1	MH	ETW	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNC1-MH-ETW

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

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-ASU1-UNC1-A-MH1-ETW-1	5.506	0.5065	0.1346	0.0056	4459.00	BGM	65.401	66.689	7.22	7.364	0.360
AITR1392-ASU1-UNC1-A-MH1-ETW-2	5.505	0.5066	0.1340	0.0056	4161.00	BGM	61.315	62.228	GE		0.446
AITR1392-ASU1-UNC1-A-MH1-ETW-3	5.506	0.5073	0.1350	0.0056	4430.00	BGM	64.681	66.151	6.75	6.904	0.337
AITR1392-ASU1-UNC1-A-MH1-ETW-4	5.502	0.5069	0.1353	0.0056	4208.00	BGM	61.341	62.890	6.45	6.614	0.330
AITR1392-ASU1-UNC1-A-MH2-ETW-1	5.503	0.5072	0.1342	0.0056	4117.00	BGM	60.500	61.493	6.79	6.906	0.335
AITR1392-ASU1-UNC1-A-MH2-ETW-2	5.503	0.5065	0.1348	0.0056	4346.00	BGM	63.649	64.999	6.53	6.665	0.310
AITR1392-ASU1-UNC1-A-MH2-ETW-3	5.504	0.5067	0.1347	0.0056	4114.00	BGM	60.276	61.509	6.64	6.777	0.319
AITR1392-ASU1-UNC1-A-MH2-ETW-4	5.504	0.5067	0.1345	0.0056	4387.00	BGM	64.367	65.586	6.65	6.774	0.346
Minimum	5.5021	0.5065	0.1340	0.0056	4114.00		60.276	61.493	6.451	6.614	0.3100
Maximum	5.5061	0.5073	0.1353	0.0056	4459.00		65.401	66.689	7.222	7.364	0.4460
Average	5.5041	0.5068	0.1346	0.0056	4277.75		62.691	63.943	6.719	6.858	0.3479
Standard Deviation	0.0014	0.0003	0.0004	0.0000	143.32		2.049	2.145	0.251	0.249	0.0425
Coefficient of Variation (%)	0.03	0.06	0.32	0.32	3.35		3.27	3.35	3.74	3.63	12.22
No. Specimens	8	8	8	8	8		8	8	7	7	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	Orientation			
	AITR	1392	ASU1	UNC1	MH	ETW2	[45,0,-45,90]3S			

Test Group: AITR1392-ASU1-UNC1-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 24

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-ASU1-UNC1-A-MH1-ETW2-1	5.506	0.5087	0.1354	0.0056	3688.00	BGT	53.561	54.927	GE		0.361
AITR1392-ASU1-UNC1-A-MH1-ETW2-2	5.505	0.5069	0.1350	0.0056	3849.00	HGM	56.260	57.524	6.88	7.037	0.338
AITR1392-ASU1-UNC1-A-MH1-ETW2-3	5.506	0.5065	0.1345	0.0056	3665.00	BGT	53.799	54.818	GE		0.396
AITR1392-ASU1-UNC1-A-MH1-ETW2-4	5.506	0.5064	0.1346	0.0056	3750.00	BGB	55.034	56.104	GE		0.363
AITR1392-ASU1-UNC1-A-MH2-ETW2-1	5.505	0.5066	0.1336	0.0056	3813.00	BGM	56.319	57.016	GE		0.384
AITR1392-ASU1-UNC1-A-MH2-ETW2-2	5.506	0.5067	0.1352	0.0056	3939.00	BGM	57.488	58.897	6.84	7.002	0.329
AITR1392-ASU1-UNC1-A-MH2-ETW2-3	5.505	0.5068	0.1335	0.0056	3805.00	HGM	56.257	56.882	7.31	7.390	0.349
AITR1392-ASU1-UNC1-A-MH2-ETW2-4	5.502	0.5071	0.1341	0.0056	3938.00	BGT	57.910	58.831	GE		0.386
AITR1392-ASU1-UNC1-B-MH1-ETW2-1	5.509	0.5067	0.1310	0.0055	3796.00	HAB	57.170	56.751	GE		0.370
AITR1392-ASU1-UNC1-B-MH1-ETW2-2	5.508	0.5065	0.1324	0.0055	4133.00	HGM	61.619	61.822	7.22	7.239	0.348
AITR1392-ASU1-UNC1-B-MH1-ETW2-3	5.508	0.5066	0.1325	0.0055	3677.00	BGB	54.765	54.986	GE		0.366
AITR1392-ASU1-UNC1-B-MH1-ETW2-4	5.507	0.5066	0.1322	0.0055	3630.00	BGT	54.198	54.280	GE		0.372
AITR1392-ASU1-UNC1-B-MH2-ETW2-1	5.509	0.5071	0.1292	0.0054	3823.00	BGM	58.351	57.113	GE		0.354
AITR1392-ASU1-UNC1-B-MH2-ETW2-2	5.508	0.5070	0.1297	0.0054	4255.00	HIT/HGM	64.719	63.575	6.45	6.336	0.314
AITR1392-ASU1-UNC1-B-MH2-ETW2-3	5.507	0.5073	0.1290	0.0054	3716.00	BGB	56.794	55.489	GE		0.358
AITR1392-ASU1-UNC1-B-MH2-ETW2-4	5.507	0.5068	0.1305	0.0054	3905.00	BGT	59.025	58.369	6.98	6.903	0.329
AITR1392-ASU1-UNC1-C-MH1-ETW2-1	5.507	0.5046	0.1320	0.0055	3525.00	BGB	52.939	52.926	GE		GE
AITR1392-ASU1-UNC1-C-MH1-ETW2-2	5.508	0.5052	0.1302	0.0054	3500.00	BGB	53.207	52.481	GE		0.366
AITR1392-ASU1-UNC1-C-MH1-ETW2-3	5.508	0.5056	0.1296	0.0054	3665.00	HGM	55.936	54.919	GE		GE
AITR1392-ASU1-UNC1-C-MH1-ETW2-4	5.507	0.5046	0.1292	0.0054	3653.00	BGM	56.043	54.840	GE		0.415
AITR1392-ASU1-UNC1-C-MH2-ETW2-1	5.506	0.5049	0.1287	0.0054	3924.00	HGM	60.403	58.878	GE		0.383
AITR1392-ASU1-UNC1-C-MH2-ETW2-2	5.507	0.5036	0.1285	0.0054	3913.00	BGB	60.467	58.864	GE		0.343
AITR1392-ASU1-UNC1-C-MH2-ETW2-3	5.506	0.5048	0.1291	0.0054	3821.00	BGM	58.613	57.340	7.18	7.024	0.298
AITR1392-ASU1-UNC1-C-MH2-ETW2-4	5.502	0.5051	0.1284	0.0054	3769.00	HGB	58.099	56.529	GE		0.480
Minimum	5.5020	0.5036	0.1284	0.0054	3500.00		52.939	52.481	6.450	6.336	0.2980
Maximum	5.5091	0.5087	0.1354	0.0056	4255.00		64.719	63.575	7.309	7.390	0.4800
Average	5.5065	0.5062	0.1316	0.0055	3798.00		57.041	56.840	6.979	6.990	0.3637
Standard Deviation	0.0018	0.0011	0.0024	0.0001	173.17		2.864	2.571	0.293	0.332	0.0375
Coefficient of Variation (%)	0.03	0.23	1.85	1.85	4.56		5.02	4.52	4.20	4.75	10.30
No. Specimens	24	24	24	24	24		24	24	7	7	22

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	Orientation			
	AITR	1392	ASU1	UNC2	MH	RTD	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-UNC2-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Soft Unnotched 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-ASU1-UNC2-A-MH1-RTD-1	5.506	0.5073	0.1117	0.0056	3213.00	EGM	56.706	57.574	4.11	4.169	0.539
AITR1392-ASU1-UNC2-A-MH1-RTD-2	5.505	0.5083	0.1117	0.0056	3043.00	BGM	53.623	54.427	4.08	4.140	0.567
AITR1392-ASU1-UNC2-A-MH1-RTD-3	5.506	0.5070	0.1119	0.0056	3398.00	EGM	59.876	60.929	3.98	4.051	0.522
AITR1392-ASU1-UNC2-A-MH1-RTD-4	5.505	0.5073	0.1115	0.0056	NT				NT		NT
AITR1392-ASU1-UNC2-A-MH2-RTD-1	5.500	0.5084	0.1129	0.0056	3061.00	EGM	53.356	54.739	3.78	3.881	0.538
AITR1392-ASU1-UNC2-A-MH2-RTD-2	5.506	0.5075	0.1128	0.0056	3392.00	EGM	59.249	60.757	3.92	4.019	0.555
AITR1392-ASU1-UNC2-A-MH2-RTD-3	5.504	0.5079	0.1122	0.0056	2757.00	EGM	48.402	49.348	4.04	4.123	0.527
AITR1392-ASU1-UNC2-A-MH2-RTD-4	5.506	0.5086	0.1123	0.0056	NT				NT		NT
Minimum	5.4999	0.5070	0.1115	0.0056	2757.00		48.402	49.348	3.783	3.881	0.5220
Maximum	5.5059	0.5086	0.1129	0.0056	3398.00		59.876	60.929	4.106	4.169	0.5670
Average	5.5046	0.5078	0.1121	0.0056	3144.00		55.202	56.296	3.985	4.064	0.5413
Standard Deviation	0.0020	0.0006	0.0005	0.0000	243.98		4.304	4.409	0.120	0.106	0.0170
Coefficient of Variation (%)	0.04	0.12	0.46	0.46	7.76		7.80	7.83	3.01	2.60	3.14
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	Orientation			
	AITR	1392	ASU1	UNC2	MH	ETW2	[45,-45,0,45,-45,90,45,-45,45,-45]S			

Test Group: AITR1392-ASU1-UNC2-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Soft 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-ASU1-UNC2-A-MH1-ETW2-1	5.505	0.5076	0.1127	0.0056	2475.00	EGM	43.267	44.329	4.02	4.119	0.542
AITR1392-ASU1-UNC2-A-MH1-ETW2-2	5.507	0.5071	0.1133	0.0057	2317.00	EGM	40.337	41.535	4.04	4.159	0.577
AITR1392-ASU1-UNC2-A-MH1-ETW2-3	5.507	0.5074	0.1124	0.0056	2409.00	EGM	42.230	43.164	3.87	3.956	0.575
AITR1392-ASU1-UNC2-A-MH1-ETW2-4	5.505	0.5075	0.1120	0.0056	NT				NT		NT
AITR1392-ASU1-UNC2-A-MH2-ETW2-1	5.507	0.5072	0.1122	0.0056	2539.00	EGM	44.616	45.508	3.92	4.000	0.537
AITR1392-ASU1-UNC2-A-MH2-ETW2-2	5.506	0.5081	0.1150	0.0057	2610.00	EGM	44.678	46.695	4.33	4.529	0.533
AITR1392-ASU1-UNC2-A-MH2-ETW2-3	5.505	0.5079	0.1139	0.0057	2481.00	EGM	42.897	44.405	4.29	4.441	0.580
AITR1392-ASU1-UNC2-A-MH2-ETW2-4	5.505	0.5082	0.1142	0.0057	NT				NT		NT
Minimum	5.5047	0.5071	0.1120	0.0056	2317.00		40.337	41.535	3.870	3.956	0.5330
Maximum	5.5066	0.5082	0.1150	0.0057	2610.00		44.678	46.695	4.333	4.529	0.5800
Average	5.5057	0.5076	0.1132	0.0057	2471.83		43.004	44.273	4.079	4.201	0.5573
Standard Deviation	0.0008	0.0004	0.0011	0.0001	101.60		1.624	1.797	0.191	0.234	0.0222
Coefficient of Variation (%)	0.01	0.08	0.94	0.94	4.11		3.78	4.06	4.68	5.57	3.97
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	Orientation			
	AITR	1392	ASU1	UNC3	MH	RTD	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-UNC3-MH-RTD

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Hard Unnotched 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-ASU1-UNC3-A-MH1-RTD-1	5.504	0.5071	0.1084	0.0054	5197.00	BGM	94.522	93.162	9.34	9.202	0.389
AITR1392-ASU1-UNC3-A-MH1-RTD-2	5.505	0.5078	0.1107	0.0055	5416.00	BGT	96.368	96.967	9.65	9.712	0.391
AITR1392-ASU1-UNC3-A-MH1-RTD-3	5.504	0.5080	0.1109	0.0055	5364.00	BGM	95.184	95.991	10.18	10.266	0.390
AITR1392-ASU1-UNC3-A-MH1-RTD-4	5.506	0.5068	0.1080	0.0054	NT				NT		NT
AITR1392-ASU1-UNC3-A-MH2-RTD-1	5.504	0.5074	0.1094	0.0055	5283.00	BGM	95.138	94.647	9.82	9.773	0.384
AITR1392-ASU1-UNC3-A-MH2-RTD-2	5.505	0.5078	0.1103	0.0055	5212.00	BGM	93.088	93.314	9.59	9.611	0.376
AITR1392-ASU1-UNC3-A-MH2-RTD-3	5.505	0.5082	0.1113	0.0056	5524.00	BGT	97.626	98.809	10.02	10.141	0.404
AITR1392-ASU1-UNC3-A-MH2-RTD-4	5.504	0.5067	0.1111	0.0056	NT				NT		NT
Minimum	5.5039	0.5067	0.1080	0.0054	5197.00		93.088	93.162	9.336	9.202	0.3760
Maximum	5.5059	0.5082	0.1113	0.0056	5524.00		97.626	98.809	10.180	10.266	0.4040
Average	5.5047	0.5075	0.1100	0.0055	5332.67		95.321	95.482	9.767	9.784	0.3890
Standard Deviation	0.0007	0.0006	0.0013	0.0001	126.47		1.555	2.205	0.306	0.383	0.0092
Coefficient of Variation (%)	0.01	0.11	1.14	1.14	2.37		1.63	2.31	3.14	3.92	2.37
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	Orientation			
	AITR	1392	ASU1	UNC3	MH	ETW2	[0,0,45,0,90,-45,0,45,0,-45]S			

Test Group: AITR1392-ASU1-UNC3-MH-ETW2

Material: **MTM45-1/AS4-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 20

Test Type: Hard 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-ASU1-UNC3-A-MH1-ETW2-1	5.506	0.5071	0.1116	0.0056	3579.00	BAT	63.242	64.162	GE		0.476
AITR1392-ASU1-UNC3-A-MH1-ETW2-2	5.505	0.5072	0.1131	0.0057	3681.00	HIT/BAT	64.146	65.973	11.82	12.156	0.420
AITR1392-ASU1-UNC3-A-MH1-ETW2-3	5.505	0.5070	0.1116	0.0056	3738.00	BAT	66.040	67.021	11.22	11.391	0.425
AITR1392-ASU1-UNC3-A-MH1-ETW2-4	5.504	0.5074	0.1145	0.0057	3918.00	HGM	67.434	70.193	9.77	10.174	0.395
AITR1392-ASU1-UNC3-A-MH2-ETW2-1	5.505	0.5073	0.1122	0.0056	3330.00	HIT	58.522	59.674	11.11	11.328	0.403
AITR1392-ASU1-UNC3-A-MH2-ETW2-2	5.506	0.5073	0.1108	0.0055	3592.00	HAT	63.920	64.365	GE		0.444
AITR1392-ASU1-UNC3-A-MH2-ETW2-3	5.505	0.5078	0.1113	0.0056	3634.00	BGM	64.298	65.058	10.39	10.516	0.424
AITR1392-ASU1-UNC3-A-MH2-ETW2-4	5.506	0.5075	0.1123	0.0056	3946.00	HGM	69.233	70.681	10.96	11.188	0.384
Minimum	5.5037	0.5070	0.1108	0.0055	3330.00		58.522	59.674	9.774	10.174	0.3840
Maximum	5.5063	0.5078	0.1145	0.0057	3946.00		69.233	70.681	11.819	12.156	0.4760
Average	5.5054	0.5073	0.1122	0.0056	3677.25		64.604	65.891	10.880	11.125	0.4214
Standard Deviation	0.0008	0.0002	0.0012	0.0001	197.58		3.188	3.533	0.710	0.701	0.0291
Coefficient of Variation (%)	0.02	0.05	1.05	1.05	5.37		4.93	5.36	6.52	6.30	6.92
No. Specimens	8	8	8	8	8		8	8	6	6	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	Orientation
	AITR	1392	ASU1	SBS1	MH	RTD	[45,0,-45,90]3S

Test Group: AITR1392-ASU1-SBS1-MH-RTD

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

Test Type: Quasi Short Beam Shear Condition: RTD #Plies: 24

Test Method: MP1116 (ASTMD2344) Span (4t): 0.52

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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-ASU1-SBS1-A-MH1-RTD-1	0.789	0.2490	0.1321	0.0055	500.00	ILS	11.404	11.409
AITR1392-ASU1-SBS1-A-MH1-RTD-2	0.789	0.2495	0.1327	0.0055	507.00	ILS	11.485	11.546
AITR1392-ASU1-SBS1-A-MH1-RTD-3	0.787	0.2510	0.1327	0.0055	477.00	ILS	10.738	10.798
AITR1392-ASU1-SBS1-A-MH1-RTD-4	0.789	0.2490	0.1329	0.0055	NT			
AITR1392-ASU1-SBS1-A-MH2-RTD-1	0.792	0.2500	0.1328	0.0055	497.00	ILS	11.230	11.295
AITR1392-ASU1-SBS1-A-MH2-RTD-2	0.791	0.2495	0.1317	0.0055	495.00	ILS	11.298	11.273
AITR1392-ASU1-SBS1-A-MH2-RTD-3	0.790	0.2495	0.1323	0.0055	490.00	ILS	11.131	11.159
AITR1392-ASU1-SBS1-A-MH2-RTD-4	0.791	0.2495	0.1324	0.0055	NT			
AITR1392-ASU1-SBS1-B-MH1-RTD-1	0.787	0.2545	0.1307	0.0054	445.00	ILS	10.036	9.935
AITR1392-ASU1-SBS1-B-MH1-RTD-2	0.786	0.2550	0.1313	0.0055	427.00	ILS	9.565	9.514
AITR1392-ASU1-SBS1-B-MH1-RTD-3	0.782	0.2555	0.1310	0.0055	428.00	ILS	9.593	9.518
AITR1392-ASU1-SBS1-B-MH1-RTD-4	0.786	0.2555	0.1299	0.0054	NT			
AITR1392-ASU1-SBS1-B-MH2-RTD-1	0.785	0.2535	0.1269	0.0053	418.00	ILS	9.748	9.369
AITR1392-ASU1-SBS1-B-MH2-RTD-2	0.786	0.2570	0.1297	0.0054	438.00	ILS	9.858	9.683
AITR1392-ASU1-SBS1-B-MH2-RTD-3	0.787	0.2555	0.1275	0.0053	417.00	ILS	9.601	9.273
AITR1392-ASU1-SBS1-B-MH2-RTD-4	0.786	0.2560	0.1278	0.0053	NT			
AITR1392-ASU1-SBS1-C-MH1-RTD-1	0.789	0.2470	0.1285	0.0054	394.00	ILS	9.313	9.063
AITR1392-ASU1-SBS1-C-MH1-RTD-2	0.790	0.2485	0.1291	0.0054	383.00	ILS	8.954	8.757
AITR1392-ASU1-SBS1-C-MH1-RTD-3	0.787	0.2490	0.1282	0.0053	374.00	ILS	8.785	8.534
AITR1392-ASU1-SBS1-C-MH1-RTD-4	0.788	0.2495	0.1277	0.0053	NT			
AITR1392-ASU1-SBS1-C-MH2-RTD-1	0.787	0.2490	0.1276	0.0053	456.00	ILS	10.764	10.405
AITR1392-ASU1-SBS1-C-MH2-RTD-2	0.788	0.2482	0.1268	0.0053	447.00	ILS	10.657	10.234
AITR1392-ASU1-SBS1-C-MH2-RTD-3	0.790	0.2490	0.1280	0.0053	460.00	ILS	10.827	10.497
AITR1392-ASU1-SBS1-C-MH2-RTD-4	0.790	0.2480	0.1275	0.0053	NT			
Minimum	0.7815	0.2470	0.1268	0.0053	374.00		8.785	8.534
Maximum	0.7915	0.2570	0.1329	0.0055	507.00		11.485	11.546
Average	0.7879	0.2512	0.1299	0.0054	447.39		10.277	10.126
Standard Deviation	0.0023	0.0031	0.0022	0.0001	41.32		0.880	0.967
Coefficient of Variation (%)	0.29	1.25	1.70	1.70	9.24		8.56	9.55
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	Orientation
	AITR	1392	ASU1	SBS1	MH	ETW	[45,0,-45,90]3S

Test Group: AITR1392-ASU1-SBS1-MH-ETW

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

Test Type: Quasi Short Beam Shear Condition: ETW #Plies: 24

Test Method: MP1116 (ASTMD2344) Span (4t): 0.54

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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-ASU1-SBS1-A-MH1-ETW-1	0.788	0.2487	0.1344	0.0056	279.00	ILS	6.260	6.375
AITR1392-ASU1-SBS1-A-MH1-ETW-2	0.789	0.2480	0.1342	0.0056	286.00	ILS	6.443	6.552
AITR1392-ASU1-SBS1-A-MH1-ETW-3	0.788	0.2490	0.1351	0.0056	295.00	ILS	6.579	6.731
AITR1392-ASU1-SBS1-A-MH1-ETW-4	0.787	0.2490	0.1356	0.0056	NT			
AITR1392-ASU1-SBS1-A-MH2-ETW-1	0.789	0.2485	0.1344	0.0056	293.00	ILS	6.578	6.699
AITR1392-ASU1-SBS1-A-MH2-ETW-2	0.790	0.2495	0.1342	0.0056	297.00	ILS	6.653	6.764
AITR1392-ASU1-SBS1-A-MH2-ETW-3	0.792	0.2490	0.1333	0.0056	287.00	ILS	6.485	6.549
AITR1392-ASU1-SBS1-A-MH2-ETW-4	0.789	0.2505	0.1336	0.0056	NT			
Minimum	0.7870	0.2480	0.1333	0.0056	279.00		6.260	6.375
Maximum	0.7920	0.2505	0.1356	0.0056	297.00		6.653	6.764
Average	0.7888	0.2490	0.1344	0.0056	289.50		6.500	6.612
Standard Deviation	0.0015	0.0007	0.0007	0.0000	6.75		0.139	0.147
Coefficient of Variation (%)	0.19	0.30	0.54	0.54	2.33		2.14	2.23
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	Orientation
	AITR	1392	ASU1	SBS1	MH	ETW2	[45,0,-45,90]3S

Test Group: AITR1392-ASU1-SBS1-MH-ETW2

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

Test Type: Quasi Short Beam Shear Condition: ETW2 #Plies: 24

Test Method: MP1116 (ASTMD2344) Span (4t): 0.52

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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-ASU1-SBS1-A-MH1-ETW2-1	0.788	0.2490	0.1338	0.0056	236.00	ILS	5.313	5.385
AITR1392-ASU1-SBS1-A-MH1-ETW2-2	0.787	0.2490	0.1343	0.0056	238.00	ILS	5.338	5.431
AITR1392-ASU1-SBS1-A-MH1-ETW2-3	0.789	0.2485	0.1341	0.0056	240.00	ILS	5.402	5.487
AITR1392-ASU1-SBS1-A-MH1-ETW2-4	0.787	0.2500	0.1339	0.0056	NT			
AITR1392-ASU1-SBS1-A-MH2-ETW2-1	0.786	0.2500	0.1337	0.0056	235.00	ILS	5.273	5.341
AITR1392-ASU1-SBS1-A-MH2-ETW2-2	0.792	0.2480	0.1342	0.0056	235.00	ILS	5.296	5.384
AITR1392-ASU1-SBS1-A-MH2-ETW2-3	0.787	0.2495	0.1340	0.0056	239.00	ILS	5.361	5.443
AITR1392-ASU1-SBS1-A-MH2-ETW2-4	0.789	0.2490	0.1329	0.0055	NT			
AITR1392-ASU1-SBS1-B-MH1-ETW2-1	0.787	0.2550	0.1321	0.0055	235.00	ILS	5.234	5.236
AITR1392-ASU1-SBS1-B-MH1-ETW2-2	0.780	0.2550	0.1329	0.0055	229.00	ILS	5.068	5.102
AITR1392-ASU1-SBS1-B-MH1-ETW2-3	0.785	0.2555	0.1332	0.0055	233.00	ILS	5.136	5.181
AITR1392-ASU1-SBS1-B-MH1-ETW2-4	0.785	0.2550	0.1312	0.0055	NT			
AITR1392-ASU1-SBS1-B-MH2-ETW2-1	0.786	0.2550	0.1287	0.0054	238.00	ILS	5.440	5.303
AITR1392-ASU1-SBS1-B-MH2-ETW2-2	0.785	0.2535	0.1275	0.0053	244.00	ILS	5.660	5.469
AITR1392-ASU1-SBS1-B-MH2-ETW2-3	0.785	0.2550	0.1286	0.0054	244.00	ILS	5.579	5.437
AITR1392-ASU1-SBS1-B-MH2-ETW2-4	0.786	0.2555	0.1308	0.0054	NT			
AITR1392-ASU1-SBS1-C-MH1-ETW2-1	0.786	0.2485	0.1288	0.0054	213.00	ILS	4.992	4.870
AITR1392-ASU1-SBS1-C-MH1-ETW2-2	0.787	0.2480	0.1296	0.0054	216.00	ILS	5.040	4.949
AITR1392-ASU1-SBS1-C-MH1-ETW2-3	0.789	0.2480	0.1298	0.0054	229.00	ILS	5.337	5.247
AITR1392-ASU1-SBS1-C-MH1-ETW2-4	0.789	0.2485	0.1303	0.0054	NT			
AITR1392-ASU1-SBS1-C-MH2-ETW2-1	0.788	0.2480	0.1280	0.0053	232.00	ILS	5.481	5.315
AITR1392-ASU1-SBS1-C-MH2-ETW2-2	0.788	0.2480	0.1296	0.0054	237.00	ILS	5.530	5.430
AITR1392-ASU1-SBS1-C-MH2-ETW2-3	0.787	0.2490	0.1279	0.0053	237.00	ILS	5.581	5.408
AITR1392-ASU1-SBS1-C-MH2-ETW2-4	0.789	0.2475	0.1275	0.0053	NT			
Minimum	0.7795	0.2475	0.1275	0.0053	213.00		4.992	4.870
Maximum	0.7915	0.2555	0.1343	0.0056	244.00		5.660	5.487
Average	0.7867	0.2508	0.1311	0.0055	233.89		5.337	5.301
Standard Deviation	0.0023	0.0031	0.0025	0.0001	8.18		0.193	0.177
Coefficient of Variation (%)	0.29	1.24	1.89	1.89	3.50		3.62	3.34
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	ASU1	FHT1	MH	CTD				

Test Group: AITR1392-ASU1-FHT1-MH-CTD

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

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

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
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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, ksi
AITR1392-ASU1-FHT1-A-MH1-CTD-1	12.0055	1.4998	0.1348	0.0056	0.2510	89.0393	0.0899	NT			
AITR1392-ASU1-FHT1-A-MH1-CTD-2	12.0054	1.5059	0.1352	0.0056	0.2511	88.7976	0.0898	12489.22	61.34	AGM	62.83
AITR1392-ASU1-FHT1-A-MH1-CTD-3	12.0054	1.5066	0.1357	0.0057	0.2509	88.4919	0.0900	11624.17	56.87	AGM	58.45
AITR1392-ASU1-FHT1-A-MH1-CTD-4	12.0051	1.5067	0.1346	0.0056	0.2512	89.2130	0.0893	11300.06	55.73	AGM	56.82
AITR1392-ASU1-FHT1-A-MH2-CTD-1	12.0074	1.5080	0.1347	0.0056	0.2513	89.1639	0.0893	12225.05	60.20	AGM	61.42
AITR1392-ASU1-FHT1-A-MH2-CTD-2	12.0029	1.5088	0.1338	0.0056	0.2508	89.7078	0.0887	11793.12	58.42	AGM	59.21
AITR1392-ASU1-FHT1-A-MH2-CTD-3	12.0074	1.5093	0.1343	0.0056	0.2512	89.4070	0.0890	11793.42	58.18	AGM	59.20
AITR1392-ASU1-FHT1-A-MH2-CTD-4	12.0074	1.4979	0.1338	0.0056	0.2510	89.7188	0.0893	NT			
AITR1392-ASU1-FHT1-B-MH1-CTD-1	12.0080	1.5077	0.1339	0.0056	0.2508	89.6565	0.0888	12008.74	59.47	AGM	60.34
AITR1392-ASU1-FHT1-B-MH1-CTD-2	12.0059	1.5074	0.1331	0.0055	0.2514	90.1798	0.0883	11632.04	57.96	AGM	58.46
AITR1392-ASU1-FHT1-B-MH1-CTD-3	11.9941	1.5077	0.1335	0.0056	0.2512	89.8434	0.0885	11532.99	57.30	AGM	57.95
AITR1392-ASU1-FHT1-B-MH1-CTD-4	12.0062	1.5075	0.1340	0.0056	0.2509	89.5985	0.0889	NT			
AITR1392-ASU1-FHT1-B-MH2-CTD-1	12.0069	1.5090	0.1326	0.0055	0.2512	90.5495	0.0879	11506.99	57.51	AGM	57.77
AITR1392-ASU1-FHT1-B-MH2-CTD-2	12.0068	1.5091	0.1325	0.0055	0.2514	90.6399	0.0878	11435.44	57.21	AGM	57.41
AITR1392-ASU1-FHT1-B-MH2-CTD-3	12.0068	1.5088	0.1337	0.0056	0.2503	89.7814	0.0886	11465.78	56.82	AGM	57.57
AITR1392-ASU1-FHT1-B-MH2-CTD-4	12.0068	1.5092	0.1316	0.0055	0.2511	91.2142	0.0872	NT			
AITR1392-ASU1-FHT1-C-MH1-CTD-1	12.0053	1.5071	0.1287	0.0054	0.2511	93.3054	0.0854	11386.59	58.72	AGM	57.24
AITR1392-ASU1-FHT1-C-MH1-CTD-2	12.0050	1.5068	0.1298	0.0054	0.2512	92.4884	0.0861	11399.18	58.28	AGM	57.31
AITR1392-ASU1-FHT1-C-MH1-CTD-3	12.0051	1.5075	0.1294	0.0054	0.2513	92.7988	0.0858	11951.58	61.29	AGM	60.06
AITR1392-ASU1-FHT1-C-MH1-CTD-4	12.0054	1.5074	0.1302	0.0054	0.2507	92.1838	0.0864	NT			
AITR1392-ASU1-FHT1-C-MH2-CTD-1	12.0055	1.5076	0.1293	0.0054	0.2506	92.8736	0.0857	11858.90	60.85	AGM	59.59
AITR1392-ASU1-FHT1-C-MH2-CTD-2	12.0057	1.5077	0.1305	0.0054	0.2510	91.9745	0.0866	11011.27	55.95	AGM	55.33
AITR1392-ASU1-FHT1-C-MH2-CTD-3	12.0051	1.5073	0.1292	0.0054	0.2505	92.8945	0.0857	11916.37	61.17	AGM	59.89
AITR1392-ASU1-FHT1-C-MH2-CTD-4	12.0050	1.5080	0.1289	0.0054	0.2512	93.1583	0.0855	NT			
Minimum	11.9941	1.4979	0.1287	0.0054	0.2503	88.4919	0.0854	11011.2710	55.7347		55.3285
Maximum	12.0080	1.5093	0.1357	0.0057	0.2514	93.3054	0.0900	12489.2190	61.3413		62.8283
Average	12.0054	1.5070	0.1324	0.0055	0.2510	90.6950	0.0879	11685.0502	58.5150		58.7131
Standard Deviation	0.0027	0.0027	0.0023	0.0001	0.0003	1.5837	0.0016	356.9457	1.8239		1.8014
Coefficient of Variation (%)	0.02	0.18	1.73	1.73	0.11	1.75	1.78	3.05	3.12		3.07
No. Specimens	24	24	24	24	24	24	24	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	ASU1	FHT1	MH	RTD				

Test Group: AITR1392-ASU1-FHT1-MH-RTD

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

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

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
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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, ksi
AITR1392-ASU1-FHT1-A-MH1-RTD-1	12.0052	1.5068	0.1343	0.0056	0.2508	89.4131	0.0891	12038.06	59.50	AGM	60.53
AITR1392-ASU1-FHT1-A-MH1-RTD-2	12.0053	1.5060	0.1362	0.0057	0.2510	88.1444	0.0904	12214.61	59.55	AGM	61.44
AITR1392-ASU1-FHT1-A-MH1-RTD-3	12.0054	1.5062	0.1342	0.0056	0.2513	89.4366	0.0891	12393.62	61.30	AGM	62.34
AITR1392-ASU1-FHT1-A-MH1-RTD-4	11.9946	1.5053	0.1352	0.0056	0.2509	88.7172	0.0898	NT			
AITR1392-ASU1-FHT1-A-MH2-RTD-1	12.0075	1.5094	0.1330	0.0055	0.2513	90.2593	0.0881	11983.08	59.68	AGM	60.14
AITR1392-ASU1-FHT1-A-MH2-RTD-2	12.0072	1.5019	0.1328	0.0055	0.2511	90.4154	0.0884	11959.56	59.96	AGM	60.33
AITR1392-ASU1-FHT1-A-MH2-RTD-3	11.9992	1.5092	0.1334	0.0056	0.2512	89.9493	0.0884	11804.59	58.63	AGM	59.26
AITR1392-ASU1-FHT1-A-MH2-RTD-4	12.0075	1.4952	0.1330	0.0055	0.2506	90.2593	0.0890	NT			
Minimum	11.9946	1.4952	0.1328	0.0055	0.2506	88.1444	0.0881	11804.5860	58.6338		59.2557
Maximum	12.0075	1.5094	0.1362	0.0057	0.2513	90.4154	0.0904	12393.6240	61.2993		62.3364
Average	12.0040	1.5050	0.1340	0.0056	0.2510	89.5743	0.0891	12065.5863	59.7705		60.6715
Standard Deviation	0.0046	0.0046	0.0012	0.0000	0.0002	0.8116	0.0008	208.2030	0.8712		1.0765
Coefficient of Variation (%)	0.04	0.31	0.89	0.89	0.10	0.91	0.87	1.73	1.46		1.77
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	ASU1	FHT2	MH	CTD				

Test Group: AITR1392-ASU1-FHT2-MH-CTD

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

Test Type: Filled-Hole Tension Layup 2 Condition: CTD #Plies: 20

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
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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, ksi
AITR1392-ASU1-FHT2-A-MH1-CTD-1	11.5060	1.5014	0.1112	0.0056	0.2509	103.4712	0.0741	7447.33	44.61	AGM	45.09
AITR1392-ASU1-FHT2-A-MH1-CTD-2	11.5020	1.5064	0.1106	0.0055	0.2514	104.0277	0.0734	7312.92	43.91	AGM	44.13
AITR1392-ASU1-FHT2-A-MH1-CTD-3	11.4980	1.5080	0.1116	0.0056	0.2513	103.0595	0.0740	7495.13	44.55	AGM	45.19
AITR1392-ASU1-FHT2-A-MH1-CTD-4	11.4970	1.5069	0.1117	0.0056	0.2510	102.8968	0.0741	NT			
AITR1392-ASU1-FHT2-A-MH2-CTD-1	11.5060	1.5043	0.1110	0.0055	0.2514	103.6888	0.0738	7442.12	44.58	AGM	44.98
AITR1392-ASU1-FHT2-A-MH2-CTD-2	11.5060	1.4996	0.1100	0.0055	0.2508	104.6317	0.0733	7362.94	44.65	AGM	44.63
AITR1392-ASU1-FHT2-A-MH2-CTD-3	11.5060	1.5045	0.1107	0.0055	0.2510	103.9386	0.0736	7491.79	44.98	AGM	45.27
AITR1392-ASU1-FHT2-A-MH2-CTD-4	11.5060	1.5041	0.1118	0.0056	0.2510	102.9159	0.0743	NT			
Minimum	11.4970	1.4996	0.1100	0.0055	0.2508	102.8968	0.0733	7312.9230	43.9053		44.1315
Maximum	11.5060	1.5080	0.1118	0.0056	0.2514	104.6317	0.0743	7495.1310	44.9837		45.2700
Average	11.5034	1.5044	0.1111	0.0056	0.2511	103.5788	0.0738	7425.3722	44.5464		44.8817
Standard Deviation	0.0039	0.0028	0.0006	0.0000	0.0002	0.6138	0.0004	72.9160	0.3515		0.4290
Coefficient of Variation (%)	0.03	0.19	0.57	0.57	0.09	0.59	0.49	0.98	0.79		0.96
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	ASU1	FHT2	MH	RTD				

Test Group: AITR1392-ASU1-FHT2-MH-RTD

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

Test Type: Filled-Hole Tension Layup 2 Condition: RTD #Plies: 20

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
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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, ksi
AITR1392-ASU1-FHT2-A-MH1-RTD-1	11.5050	1.5069	0.1108	0.0055	0.2514	103.8670	0.0735	6737.13	40.36	AGM	40.64
AITR1392-ASU1-FHT2-A-MH1-RTD-2	11.5060	1.5068	0.1111	0.0056	0.2513	103.5644	0.0737	7008.34	41.87	AGM	42.28
AITR1392-ASU1-FHT2-A-MH1-RTD-3	11.5060	1.5010	0.1123	0.0056	0.2503	102.4577	0.0748	6892.12	40.89	AGM	41.74
AITR1392-ASU1-FHT2-A-MH1-RTD-4	11.5060	1.4955	0.1109	0.0055	0.2510	103.7200	0.0742	NT			
AITR1392-ASU1-FHT2-A-MH2-RTD-1	11.5060	1.5046	0.1108	0.0055	0.2515	103.8135	0.0737	7172.40	43.01	AGM	43.34
AITR1392-ASU1-FHT2-A-MH2-RTD-2	11.5070	1.5045	0.1087	0.0054	0.2504	105.8926	0.0722	7204.13	44.07	AGM	43.53
AITR1392-ASU1-FHT2-A-MH2-RTD-3	11.5060	1.5048	0.1110	0.0056	0.2502	103.6577	0.0738	6974.16	41.75	AGM	42.13
AITR1392-ASU1-FHT2-A-MH2-RTD-4					0.0000			NT			
Minimum	11.5050	1.4955	0.1087	0.0054	0.0000	102.4577	0.0722	6737.1310	40.3628		40.6441
Maximum	11.5070	1.5069	0.1123	0.0056	0.2515	105.8926	0.0748	7204.1270	44.0659		43.5317
Average	11.5060	1.5034	0.1108	0.0055	0.2195	103.8533	0.0737	6998.0450	41.9912		42.2789
Standard Deviation	0.0006	0.0040	0.0011	0.0001	0.0887	1.0204	0.0008	174.8385	1.3628		1.0650
Coefficient of Variation (%)	0.01	0.27	0.97	0.97	40.41	0.98	1.06	2.50	3.25		2.52
No. Specimens	7	7	7	7	8	7	7	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	ASU1	FHT2	MH	ETW2				

Test Group: AITR1392-ASU1-FHT2-MH-ETW2

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

Test Type: Filled-Hole Tension Layup 2 Condition: ETW2 #Plies: 20

Test Method: MP1118 (ASTMD6742)

ACG, Inc.
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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, ksi
AITR1392-ASU1-FHT2-A-MH1-ETW2-1	11.4938	1.4987	0.1128	0.005638	0.2515	101.9406	0.0752	5868.50	34.73	AGM	35.60
AITR1392-ASU1-FHT2-A-MH1-ETW2-2	11.4925	1.4965	0.1112	0.005559	0.2509	103.3653	0.0743	5935.39	35.67	AGM	36.06
AITR1392-ASU1-FHT2-A-MH1-ETW2-3	11.4933	1.5047	0.1116	0.005580	0.2513	102.9866	0.0742	5960.67	35.50	AGM	36.01
AITR1392-ASU1-FHT2-A-MH1-ETW2-4	11.4926	1.4995	0.1115	0.005575	0.2508	103.0726	0.0744	NT			
AITR1392-ASU1-FHT2-A-MH2-ETW2-1	11.4925	1.5023	0.1116	0.005580	0.2516	102.9794	0.0743	5899.86	35.19	AGM	35.70
AITR1392-ASU1-FHT2-A-MH2-ETW2-2	11.4925	1.5020	0.1111	0.005556	0.2514	103.4273	0.0740	5906.31	35.39	AGM	35.75
AITR1392-ASU1-FHT2-A-MH2-ETW2-3	11.4927	1.5018	0.1109	0.005547	0.2514	103.6001	0.0739	5962.51	35.79	AGM	36.09
AITR1392-ASU1-FHT2-A-MH2-ETW2-4	11.4937	1.4967	0.1114	0.005568	0.2521	103.2059	0.0744	NT			
Minimum	11.4925	1.4965	0.1109	0.005547	0.2508	101.9406	0.0739	5868.5030	34.7301		35.5983
Maximum	11.4938	1.5047	0.1128	0.005638	0.2521	103.6001	0.0752	5962.5060	35.7886		36.0923
Average	11.4930	1.5003	0.1115	0.005575	0.2514	103.0722	0.0743	5922.2065	35.3777		35.8682
Standard Deviation	0.0006	0.0029	0.0006	0.0000	0.0004	0.5078	0.0004	37.1844	0.3808		0.2106
Coefficient of Variation (%)	0.00	0.19	0.50	0.50	0.16	0.49	0.56	0.63	1.08		0.59
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	ASU1	FHT3	MH	CTD				

Test Group: AITR1392-ASU1-FHT3-MH-CTD

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

Test Type: Filled-Hole Tension Layup 3 Condition: CTD #Plies: 20

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, ksi
AITR1392-ASU1-FHT3-A-MH1-CTD-1	12.0058	1.509	0.1103	0.0055	0.2513	108.8797	0.0731	14604.51	87.77	SGM/AGM	87.98
AITR1392-ASU1-FHT3-A-MH1-CTD-2	12.0060	1.509	0.1099	0.0055	0.2508	109.2776	0.0728	14957.44	90.24	SGM/AGM	90.13
AITR1392-ASU1-FHT3-A-MH1-CTD-3	12.0059	1.507	0.1108	0.0055	0.2510	108.3894	0.0735	16279.20	97.49	SGM/AGM	98.17
AITR1392-ASU1-FHT3-A-MH1-CTD-4	12.0058	1.508	0.1104	0.0055	0.2514	108.7813	0.0732	NT			
AITR1392-ASU1-FHT3-A-MH2-CTD-1	12.0060	1.508	0.1127	0.0056	0.2509	106.4991	0.0748	15642.00	92.04	SGM/AGM	94.33
AITR1392-ASU1-FHT3-A-MH2-CTD-2	12.0060	1.509	0.1141	0.0057	0.2512	105.2539	0.0756	15987.16	92.91	SGM/AGM	96.35
AITR1392-ASU1-FHT3-A-MH2-CTD-3	12.0062	1.508	0.1129	0.0056	0.2506	106.3748	0.0748	16254.15	95.48	SGM/AGM	97.97
AITR1392-ASU1-FHT3-A-MH2-CTD-4	12.0062	1.508	0.1126	0.0056	0.2510	106.6270	0.0746	NT			
Minimum	12.0058	1.507	0.1099	0.0055	0.2506	105.2539	0.0728	14604.5050	87.7695		87.9823
Maximum	12.0062	1.509	0.1141	0.0057	0.2514	109.2776	0.0756	16279.1960	97.4936		98.1731
Average	12.0060	1.508	0.1117	0.0056	0.2510	107.5104	0.0741	15620.7412	92.6548		94.1537
Standard Deviation	0.0001	0.0005	0.0016	0.0001	0.0003	1.4914	0.0010	698.8820	3.5087		4.2390
Coefficient of Variation (%)	0.001	0.04	1.39	1.39	0.11	1.39	1.40	4.47	3.79		4.50
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	ASU1	FHT3	MH	RTD				

Test Group: AITR1392-ASU1-FHT3-MH-RTD

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

Test Type: Filled-Hole Tension Layup 3 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-FHT3-A-MH1-RTD-1	12.0059	1.5086	0.1099	0.0055	0.2513	109.2442	0.0728	15883.40	95.80	MGM	95.71
AITR1392-ASU1-FHT3-A-MH1-RTD-2	12.0057	1.5086	0.1112	0.0056	0.2512	107.9652	0.0737	15242.15	90.86	MGM	91.85
AITR1392-ASU1-FHT3-A-MH1-RTD-3	12.0055	1.5086	0.1107	0.0055	0.2505	108.4834	0.0734	14438.36	86.48	MGM	87.00
AITR1392-ASU1-FHT3-A-MH1-RTD-4	12.0055	1.5086	0.1104	0.0055	0.2510	108.7126	0.0732	NT			
AITR1392-ASU1-FHT3-A-MH2-RTD-1	12.0053	1.5092	0.1125	0.0056	0.2508	106.7135	0.0745	15002.39	88.36	MGM	90.37
AITR1392-ASU1-FHT3-A-MH2-RTD-2	12.0062	1.5081	0.1130	0.0057	0.2510	106.2179	0.0750	15220.80	89.29	MGM	91.75
AITR1392-ASU1-FHT3-A-MH2-RTD-3	12.0063	1.5071	0.1118	0.0056	0.2513	107.3589	0.0742	14013.44	83.14	MGM	84.53
AITR1392-ASU1-FHT3-A-MH2-RTD-4	12.0063	1.5067	0.1130	0.0057	0.2513	106.2504	0.0750	NT			
Minimum	12.0053	1.5067	0.1099	0.0055	0.2505	106.2179	0.0728	14013.4370	83.1422		84.5279
Maximum	12.0063	1.5092	0.1130	0.0057	0.2513	109.2442	0.0750	15883.3960	95.8013		95.7142
Average	12.0058	1.5082	0.1116	0.0056	0.2511	107.6183	0.0740	14966.7552	88.9892		90.2033
Standard Deviation	0.0004	0.0009	0.0012	0.0001	0.0003	1.1605	0.0008	658.7708	4.2630		3.9484
Coefficient of Variation (%)	0.003	0.06	1.08	1.08	0.11	1.08	1.11	4.40	4.79		4.38
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	ASU1	FHC1	MH	RTD						

Test Group: AITR1392-ASU1-FHC1-MH-RTD

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

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

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, ksi
AITR1392-ASU1-FHC1-A-MH1-RTD-1	12.0055	1.5073	0.1347	0.0056	0.2509	0.6230	5.8705	6.0077	1.8627	13082.00	64.43	LGF	65.75
AITR1392-ASU1-FHC1-A-MH1-RTD-2	12.0061	1.5082	0.1335	0.0056	0.2510	0.6262	5.8695	6.0088	1.8801	13123.00	65.18	LGF	65.92
AITR1392-ASU1-FHC1-A-MH1-RTD-3	12.0057	1.5097	0.1340	0.0056	0.2512	0.6266	5.8715	6.0100	1.8746	13174.00	65.12	LGF	66.11
AITR1392-ASU1-FHC1-A-MH1-RTD-4	12.0057	1.5092	0.1340	0.0056	0.2513	0.6271	5.8695	6.0057	1.8749	NT			
AITR1392-ASU1-FHC1-A-MH2-RTD-1	12.0078	1.5073	0.1339	0.0056	0.2514	0.6265	5.8685	5.9958	1.8775	12898.00	63.90	LGF	64.82
AITR1392-ASU1-FHC1-A-MH2-RTD-2	12.0074	1.5095	0.1339	0.0056	0.2503	0.6278	5.873	6.0309	1.8698	12898.00	63.83	LGF	64.73
AITR1392-ASU1-FHC1-A-MH2-RTD-3	12.0073	1.5095	0.1334	0.0056	0.2514	0.6290	5.8705	6.0044	1.8846	12565.00	62.40	LGF	63.06
AITR1392-ASU1-FHC1-A-MH2-RTD-4	12.0075	1.5077	0.1335	0.0056	0.2511	0.6236	5.8715	6.0045	1.8809	NT			
Minimum	12.0055	1.5073	0.1334	0.0056	0.2503	0.6230	5.8685	5.9958	1.8627	12565.0000	62.3984		63.0602
Maximum	12.0078	1.5097	0.1347	0.0056	0.2514	0.6290	5.8730	6.0309	1.8846	13174.0000	65.1768		66.1079
Average	12.0066	1.5086	0.1339	0.0056	0.2511	0.6262	5.8706	6.0085	1.8756	12956.6667	64.1433		65.0649
Standard Deviation	0.0010	0.0010	0.0004	0.0000	0.0004	0.0020	0.0014	0.0101	0.0069	224.0068	1.0304		1.1377
Coefficient of Variation (%)	0.01	0.07	0.31	0.31	0.14	0.32	0.02	0.17	0.37	1.73	1.61		1.75
No. Specimens	8	8	8	8	8	8	8	8	8	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	ASU1	FHC1	MH	ETW2						

Test Group: AITR1392-ASU1-FHC1-MH-ETW2

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

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

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, ksi
AITR1392-ASU1-FHC1-A-MH1-ETW2-1	12.0108	1.5097	0.1348	0.0056	0.2512	0.6280	5.8685	6.0098	1.8637	8848.00	43.48	LGM	44.40
AITR1392-ASU1-FHC1-A-MH1-ETW2-2	12.0108	1.5102	0.1350	0.0056	0.2510	0.6250	5.8685	6.0166	1.8593	8945.00	43.88	LGM	44.87
AITR1392-ASU1-FHC1-A-MH1-ETW2-3	12.0101	1.5048	0.1346	0.0056	0.2510	0.6205	5.8705	5.9954	1.8643	7614.00	37.58	LGM	38.33
AITR1392-ASU1-FHC1-A-MH1-ETW2-4	12.0102	1.5028	0.1351	0.0056	0.2511	0.6190	5.8685	5.9850	1.8589	8496.00	41.85	LGM	42.83
AITR1392-ASU1-FHC1-A-MH2-ETW2-1	12.0124	1.5062	0.1340	0.0056	0.2513	0.6220	5.872	5.9935	1.8754	9378.00	46.47	LGM	47.17
AITR1392-ASU1-FHC1-A-MH2-ETW2-2	12.0119	1.5082	0.1345	0.0056	0.2517	0.6185	5.8795	5.9919	1.8718	9636.00	47.52	LGM	48.40
AITR1392-ASU1-FHC1-A-MH2-ETW2-3	12.0119	1.5070	0.1347	0.0056	0.2512	0.6230	5.87	5.9992	1.8653	8877.00	43.74	LGM	44.63
AITR1392-ASU1-FHC1-A-MH2-ETW2-4	12.0121	1.5100	0.1339	0.0056	0.2513	0.6275	5.872	6.0088	1.8775	NT			
AITR1392-ASU1-FHC1-B-MH1-ETW2-1	12.0032	1.5071	0.1098	0.0046	0.2514	0.6235	5.868	5.9947	2.2896	9216.00	55.69	LGM	46.33
AITR1392-ASU1-FHC1-B-MH1-ETW2-2	12.0032	1.5070	0.1104	0.0046	0.2514	0.6240	5.868	5.9943	2.2772	9302.00	55.91	LGM	46.76
AITR1392-ASU1-FHC1-B-MH1-ETW2-3	12.0033	1.5072	0.1098	0.0046	0.2503	0.6285	5.867	6.0217	2.2799	9617.00	58.12	LGM	48.34
AITR1392-ASU1-FHC1-B-MH1-ETW2-4	12.0032	1.5070	0.1093	0.0046	0.2506	0.6255	5.8645	6.0137	2.2935	NT			
AITR1392-ASU1-FHC1-B-MH2-ETW2-1	12.0039	1.5067	0.1314	0.0055	0.2508	0.6270	5.869	6.0077	1.9094	9227.00	46.62	LGM	46.39
AITR1392-ASU1-FHC1-B-MH2-ETW2-2	12.0036	1.5061	0.1305	0.0054	0.2508	0.6230	5.8735	6.0051	1.9218	10018.00	50.97	LGM	50.39
AITR1392-ASU1-FHC1-B-MH2-ETW2-3	12.0040	1.5050	0.1323	0.0055	0.2510	0.6250	5.864	5.9959	1.8974	9580.00	48.12	LGM	48.22
AITR1392-ASU1-FHC1-B-MH2-ETW2-4	12.0039	1.5065	0.1310	0.0055	0.2505	0.6230	5.8665	6.0138	1.9125	NT			
AITR1392-ASU1-FHC1-C-MH1-ETW2-1	12.0059	1.5049	0.1284	0.0053	0.2512	0.6240	5.872	5.9907	1.9566	8472.00	43.85	LGM	42.65
AITR1392-ASU1-FHC1-C-MH1-ETW2-2	12.0059	1.5049	0.1280	0.0053	0.2514	0.6270	5.87	5.9861	1.9646	9293.00	48.26	LGM	46.78
AITR1392-ASU1-FHC1-C-MH1-ETW2-3	12.0059	1.5057	0.1277	0.0053	0.2513	0.6275	5.8655	5.9918	1.9682	8635.00	44.91	LGM	43.45
AITR1392-ASU1-FHC1-C-MH1-ETW2-4	12.0061	1.5064	0.1282	0.0053	0.2511	0.6230	5.8725	5.9992	1.9581	NT			
AITR1392-ASU1-FHC1-C-MH2-ETW2-1	12.0044	1.5048	0.1303	0.0054	0.2508	0.6225	5.8665	6.0000	1.9243	8709.00	44.41	LGM	43.84
AITR1392-ASU1-FHC1-C-MH2-ETW2-2	12.0046	1.5057	0.1288	0.0054	0.2512	0.6290	5.867	5.9942	1.9498	8511.00	43.87	LGM	42.82
AITR1392-ASU1-FHC1-C-MH2-ETW2-3	12.0045	1.5055	0.1279	0.0053	0.2513	0.6210	5.8725	5.9908	1.9651	8113.00	42.14	LGM	40.83
AITR1392-ASU1-FHC1-C-MH2-ETW2-4	12.0047	1.5040	0.1296	0.0054	0.2510	0.6215	5.8705	5.9922	1.9370	NT			
Minimum	12.0032	1.5028	0.1093	0.0046	0.2503	0.6185	5.8640	5.9850	1.8589	7614.0000	37.5813		38.3310
Maximum	12.0124	1.5102	0.1351	0.0056	0.2517	0.6290	5.8795	6.0217	2.2935	10018.0000	58.1196		50.3922
Average	12.0067	1.5064	0.1279	0.0053	0.2511	0.6241	5.8694	5.9997	1.9726	8973.0000	46.7049		45.1281
Standard Deviation	0.0035	0.0018	0.0087	0.0004	0.0003	0.0030	0.0034	0.0101	0.1476	591.6563	5.2634		2.9602
Coefficient of Variation (%)	0.03	0.12	6.77	6.77	0.13	0.47	0.06	0.17	7.48	6.59	11.27		6.56
No. Specimens	24	24	24	24	24	24	24	24	24	19	19		19

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	FHC2	MH	RTD						

Test Group: AITR1392-ASU1-FHC2-MH-RTD

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

Test Type: Filled-Hole Compression Layup 2 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-FHC2-A-MH1-RTD-1	11.9991	1.5055	0.1122	0.0056	0.2509	0.6232	5.865	6.0003	2.2362	8150.00	48.25	AGF	49.21
AITR1392-ASU1-FHC2-A-MH1-RTD-2	11.9988	1.5045	0.1114	0.0056	0.2512	0.6234	5.8805	5.9893	2.2549	7704.00	45.97	AGF	46.55
AITR1392-ASU1-FHC2-A-MH1-RTD-3	11.9996	1.5056	0.1118	0.0056	0.2513	0.6240	5.8665	5.9914	2.2484	7740.00	45.99	AGF	46.73
AITR1392-ASU1-FHC2-A-MH1-RTD-4	12.0006	1.5042	0.1123	0.0056	0.2513	0.6231	5.8665	5.9858	2.2371	NT			
AITR1392-ASU1-FHC2-A-MH2-RTD-1	12.0072	1.5026	0.1115	0.0056	0.2512	0.6191	5.871	5.9818	2.2536	8560.00	51.11	AGF	51.79
AITR1392-ASU1-FHC2-A-MH2-RTD-2	12.0069	1.5023	0.1114	0.0056	0.2506	0.6206	5.874	5.9947	2.2502	7820.00	46.74	AGF	47.32
AITR1392-ASU1-FHC2-A-MH2-RTD-3	12.0071	1.5024	0.1113	0.0056	0.2513	0.6204	5.872	5.9786	2.2572	8457.00	50.56	AGF	51.17
AITR1392-ASU1-FHC2-A-MH2-RTD-4	12.0074	1.5034	0.1124	0.0056	0.2514	0.6190	5.876	5.9801	2.2373	NT			
Minimum	11.9988	1.5023	0.1113	0.0056	0.2506	0.6190	5.8650	5.9786	2.2362	7704.0000	45.9662		46.5513
Maximum	12.0074	1.5056	0.1124	0.0056	0.2514	0.6240	5.8805	6.0003	2.2572	8560.0000	51.1065		51.7879
Average	12.0033	1.5038	0.1118	0.0056	0.2512	0.6216	5.8714	5.9877	2.2469	8071.8333	48.1029		48.7969
Standard Deviation	0.0041	0.0013	0.0005	0.0000	0.0003	0.0020	0.0053	0.0076	0.0087	374.5944	2.2775		2.2906
Coefficient of Variation (%)	0.03	0.09	0.41	0.41	0.11	0.33	0.09	0.13	0.39	4.64	4.73		4.69
No. Specimens	8	8	8	8	8	8	8	8	8	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	ASU1	FHC2	MH	ETW2						

Test Group: AITR1392-ASU1-FHC2-MH-ETW2

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

Test Type: Filled-Hole Compression Layup 2 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-FHC2-A-MH1-ETW2-1	12.0045	1.5042	0.1121	0.0056	0.2511	0.6225	5.8755	5.9903	2.2393	5467.00	32.41	LGF	33.04
AITR1392-ASU1-FHC2-A-MH1-ETW2-2	12.0045	1.5037	0.1120	0.0056	0.2512	0.6225	5.866	5.9859	2.2429	5496.00	32.63	AGM	33.23
AITR1392-ASU1-FHC2-A-MH1-ETW2-3	12.0049	1.4965	0.1119	0.0056	0.2511	0.6290	5.867	5.9598	2.2443	5871.00	35.06	AGM	35.67
AITR1392-ASU1-FHC2-A-MH1-ETW2-4	11.9968	1.5043	0.1117	0.0056	0.2513	0.6240	5.879	5.9862	2.2491	NT			
AITR1392-ASU1-FHC2-A-MH2-ETW2-1	12.0121	1.4953	0.1115	0.0056	0.2513	0.6285	5.883	5.9504	2.2538	5553.00	33.31	AGM	33.76
AITR1392-ASU1-FHC2-A-MH2-ETW2-2	12.0120	1.4962	0.1125	0.0056	0.2511	0.6300	5.8785	5.9584	2.2320	6206.00	36.87	AGM	37.71
AITR1392-ASU1-FHC2-A-MH2-ETW2-3	12.0119	1.4993	0.1122	0.0056	0.2513	0.6295	5.8705	5.9663	2.2404	5886.00	35.00	LGM	35.69
AITR1392-ASU1-FHC2-A-MH2-ETW2-4	12.0114	1.4912	0.1124	0.0056	0.2515	0.6315	5.872	5.9291	2.2369	NT			
AITR1392-ASU1-FHC2-B-MH1-ETW2-1	12.0046	1.5093	0.1093	0.0055	0.2514	0.6240	5.8655	6.0036	2.2994	6023.00	36.50	AGM	36.28
AITR1392-ASU1-FHC2-B-MH1-ETW2-2	12.0044	1.5086	0.1100	0.0055	0.2515	0.6240	5.866	5.9984	2.2857	6032.00	36.34	AGM	36.35
AITR1392-ASU1-FHC2-B-MH1-ETW2-3	12.0047	1.5085	0.1094	0.0055	0.2513	0.6230	5.868	6.0027	2.2981	6074.00	36.82	LAF	36.61
AITR1392-ASU1-FHC2-B-MH1-ETW2-4	12.0028	1.5085	0.1102	0.0055	0.2509	0.6255	5.8685	6.0124	2.2775	NT			
AITR1392-ASU1-FHC2-B-MH2-ETW2-1	12.0042	1.5062	0.1101	0.0055	0.2509	0.6220	5.869	6.0031	2.2795	6087.00	36.72	AGF	36.74
AITR1392-ASU1-FHC2-B-MH2-ETW2-2	12.0047	1.5067	0.1102	0.0055	0.2511	0.6205	5.8685	6.0004	2.2789	5784.00	34.84	AGM	34.90
AITR1392-ASU1-FHC2-B-MH2-ETW2-3	12.0045	1.5070	0.1103	0.0055	0.2511	0.6215	5.869	6.0017	2.2769	6154.00	37.03	LGF	37.12
AITR1392-ASU1-FHC2-B-MH2-ETW2-4	12.0044	1.5075	0.1106	0.0055	0.2502	0.6215	5.8695	6.0250	2.2625	NT			
AITR1392-ASU1-FHC2-C-MH1-ETW2-1	12.0040	1.5088	0.1061	0.0053	0.2507	0.6200	5.87	6.0185	2.3640	6047.00	37.79	AGF	36.43
AITR1392-ASU1-FHC2-C-MH1-ETW2-2	12.0044	1.5087	0.1074	0.0054	0.2512	0.6210	5.8695	6.0060	2.3382	5714.00	35.25	AGF	34.43
AITR1392-ASU1-FHC2-C-MH1-ETW2-3	12.0045	1.5083	0.1074	0.0054	0.2507	0.6205	5.873	6.0165	2.3339	5932.00	36.61	AGF	35.75
AITR1392-ASU1-FHC2-C-MH1-ETW2-4	12.0038	1.5085	0.1061	0.0053	0.2513	0.6220	5.8705	6.0029	2.3689	NT			
AITR1392-ASU1-FHC2-C-MH2-ETW2-1	12.0036	1.5083	0.1063	0.0053	0.2511	0.6225	5.8665	6.0069	2.3622	5593.00	34.88	AGM	33.71
AITR1392-ASU1-FHC2-C-MH2-ETW2-2	12.0013	1.5073	0.1058	0.0053	0.2508	0.6225	5.8645	6.0101	2.3709	5799.00	36.37	AGF	34.97
AITR1392-ASU1-FHC2-C-MH2-ETW2-3	12.0029	1.5083	0.1063	0.0053	0.2510	0.6245	5.866	6.0090	2.3612	5837.00	36.41	AGF	35.18
AITR1392-ASU1-FHC2-C-MH2-ETW2-4	12.0013	1.5087	0.1065	0.0053	0.2508	0.6265	5.8815	6.0156	2.3549	NT			
Minimum	11.9968	1.4912	0.1058	0.0053	0.2502	0.6200	5.8645	5.9291	2.2320	5467.0000	32.4129		33.0416
Maximum	12.0121	1.5093	0.1125	0.0056	0.2515	0.6315	5.8830	6.0250	2.3709	6206.0000	37.7910		37.7085
Average	12.0049	1.5050	0.1095	0.0055	0.2511	0.6241	5.8707	5.9941	2.2938	5864.1667	35.6027		35.4205
Standard Deviation	0.0036	0.0052	0.0024	0.0001	0.0003	0.0033	0.0052	0.0243	0.0496	228.0470	1.5510		1.3678
Coefficient of Variation (%)	0.03	0.35	2.18	2.18	0.12	0.53	0.09	0.41	2.16	3.89	4.36		3.86
No. Specimens	24	24	24	24	24	24	24	24	24	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	ASU1	FHC3	MH	RTD						

Test Group: AITR1392-ASU1-FHC3-MH-RTD

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

Test Type: Filled-Hole Compression Layup 3 Condition: RTD #Plies: 20

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, ksi
AITR1392-ASU1-FHC3-A-MH1-RTD-1	12.0058	1.5072	0.1116	0.0056	0.2513	0.6226	5.87	5.9977	2.2511	NT			
AITR1392-ASU1-FHC3-A-MH1-RTD-2	12.0060	1.5076	0.1116	0.0056	0.2513	0.6223	5.8685	5.9992	2.2518	13831.00	82.21	LGM	83.40
AITR1392-ASU1-FHC3-A-MH1-RTD-3	12.0057	1.5063	0.1114	0.0056	0.2510	0.6217	5.8685	6.0011	2.2538	13479.00	80.35	MGM	81.35
AITR1392-ASU1-FHC3-A-MH1-RTD-4	12.0060	1.5069	0.1111	0.0056	0.2509	0.6244	5.8705	6.0058	2.2590	14712.00	87.90	LGF	88.76
AITR1392-ASU1-FHC3-A-MH2-RTD-1	12.0061	1.5085	0.1136	0.0057	0.2514	0.6248	5.872	6.0005	2.2137	13847.00	80.83	LGF	83.45
AITR1392-ASU1-FHC3-A-MH2-RTD-2	12.0067	1.5092	0.1139	0.0057	0.2514	0.6257	5.8725	6.0032	2.2078	13708.00	79.77	LGF	82.57
AITR1392-ASU1-FHC3-A-MH2-RTD-3	12.0064	1.5082	0.1142	0.0057	0.2514	0.6265	5.8715	5.9993	2.2014	13506.00	78.41	LGM	81.41
AITR1392-ASU1-FHC3-A-MH2-RTD-4	12.0064	1.5079	0.1149	0.0057	0.2513	0.6247	5.869	6.0004	2.1871	NT			
Minimum	12.0057	1.5063	0.1111	0.0056	0.2509	0.6217	5.8685	5.9977	2.1871	13479.0000	78.4137		81.3510
Maximum	12.0067	1.5092	0.1149	0.0057	0.2514	0.6265	5.8725	6.0058	2.2590	14712.0000	87.9049		88.7573
Average	12.0061	1.5077	0.1128	0.0056	0.2513	0.6241	5.8703	6.0009	2.2282	13847.1667	81.5786		83.4894
Standard Deviation	0.0003	0.0009	0.0015	0.0001	0.0002	0.0017	0.0016	0.0025	0.0286	451.5544	3.3400		2.7389
Coefficient of Variation (%)	0.003	0.06	1.34	1.34	0.08	0.27	0.03	0.04	1.28	3.26	4.09		3.28
No. Specimens	8	8	8	8	8	8	8	8	8	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	ASU1	FHC3	MH	ETW2						

Test Group: AITR1392-ASU1-FHC3-MH-ETW2

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

Test Type: Filled-Hole Compression Layup 3 Condition: ETW2 #Plies: 20

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, ksi
AITR1392-ASU1-FHC3-A-MH1-ETW2-1	12.0101	1.5057	0.1108	0.0055	0.2512	0.6215	5.8675	5.9939	2.2675	10283.00	61.65	LGM	62.09
AITR1392-ASU1-FHC3-A-MH1-ETW2-2	12.0099	1.5063	0.1110	0.0056	0.2509	0.6200	5.8685	6.0037	2.2597	9920.00	59.31	LGM	59.87
AITR1392-ASU1-FHC3-A-MH1-ETW2-3	12.0101	1.5067	0.1107	0.0055	0.2513	0.6225	5.8705	5.9955	2.2694	10665.00	63.92	LGM	64.35
AITR1392-ASU1-FHC3-A-MH1-ETW2-4	12.0100	1.5057	0.1115	0.0056	0.2508	0.6215	5.8695	6.0035	2.2503	10404.00	62.00	LGM	62.82
AITR1392-ASU1-FHC3-A-MH2-ETW2-1	12.0103	1.5078	0.1118	0.0056	0.2509	0.6230	5.87	6.0097	2.2445	9400.00	55.77	LGM	56.67
AITR1392-ASU1-FHC3-A-MH2-ETW2-2	12.0096	1.5047	0.1116	0.0056	0.2513	0.6210	5.8695	5.9875	2.2528	NT			
AITR1392-ASU1-FHC3-A-MH2-ETW2-3	12.0101	1.5083	0.1117	0.0056	0.2511	0.6285	5.87	6.0069	2.2483	9923.00	58.91	LGM	59.81
AITR1392-ASU1-FHC3-A-MH2-ETW2-4	12.0099	1.5072	0.1118	0.0056	0.2512	0.6240	5.8685	5.9999	2.2479	9711.00	57.66	LGM	58.57
AITR1392-ASU1-FHC3-B-MH1-ETW2-1	12.0045	1.5088	0.1095	0.0055	0.2526	0.6225	5.8745	5.9729	2.3076	8396.00	50.84	LGM	50.59
AITR1392-ASU1-FHC3-B-MH1-ETW2-2	12.0044	1.5082	0.1098	0.0055	0.2524	0.6230	5.8695	5.9753	2.2987	8760.00	52.90	LGM	52.80
AITR1392-ASU1-FHC3-B-MH1-ETW2-3	12.0042	1.5037	0.1094	0.0055	0.2521	0.6205	5.869	5.9648	2.3047	9025.00	54.87	LGM	54.56
AITR1392-ASU1-FHC3-B-MH1-ETW2-4	12.0042	1.5087	0.1107	0.0055	0.2525	0.6230	5.872	5.9750	2.2820	8354.00	50.04	LGM	50.34
AITR1392-ASU1-FHC3-B-MH2-ETW2-1	12.0063	1.5077	0.1155	0.0058	0.2506	0.6250	5.879	6.0165	2.1691	9652.00	55.41	LGM	58.20
AITR1392-ASU1-FHC3-B-MH2-ETW2-2	12.0065	1.5078	0.1143	0.0057	0.2513	0.6250	5.878	6.0001	2.1983	9289.00	53.89	LGM	56.00
AITR1392-ASU1-FHC3-B-MH2-ETW2-3	12.0061	1.5086	0.1157	0.0058	0.2515	0.6280	5.8775	5.9984	2.1744	9571.00	54.85	LGM	57.68
AITR1392-ASU1-FHC3-B-MH2-ETW2-4	12.0062	1.5071	0.1148	0.0057	0.2510	0.6215	5.8755	6.0042	2.1864	10832.00	62.61	LGM	65.34
AITR1392-ASU1-FHC3-C-MH1-ETW2-1	12.0001	1.5036	0.1057	0.0053	0.2527	0.6225	5.8665	5.9501	2.3911	8131.00	51.17	LGM	49.16
AITR1392-ASU1-FHC3-C-MH1-ETW2-2	12.0039	1.5035	0.1060	0.0053	0.2517	0.6235	5.8685	5.9734	2.3753	8995.00	56.46	LGM	54.39
AITR1392-ASU1-FHC3-C-MH1-ETW2-3	12.0043	1.5040	0.1083	0.0054	0.2524	0.6210	5.871	5.9589	2.3306	8188.00	50.27	LGM	49.49
AITR1392-ASU1-FHC3-C-MH1-ETW2-4	12.0041	1.5028	0.1064	0.0053	0.2523	0.6225	5.8705	5.9563	2.3724	7703.00	48.20	LGM	46.60
AITR1392-ASU1-FHC3-C-MH2-ETW2-1	12.0047	1.5014	0.1076	0.0054	0.2515	0.6205	5.8675	5.9696	2.3377	10371.00	64.21	LGM	62.80
AITR1392-ASU1-FHC3-C-MH2-ETW2-2	12.0038	1.5030	0.1079	0.0054	0.2508	0.6215	5.8675	5.9927	2.3237	NT			
AITR1392-ASU1-FHC3-C-MH2-ETW2-3	12.0045	1.5016	0.1054	0.0053	0.2512	0.6205	5.8685	5.9778	2.3825	NT			
AITR1392-ASU1-FHC3-C-MH2-ETW2-4	12.0044	1.5023	0.1070	0.0053	0.2512	0.6195	5.867	5.9805	2.3488	10125.00	63.02	LGM	61.27
Minimum	12.0001	1.5014	0.1054	0.0053	0.2506	0.6195	5.8665	5.9501	2.1691	7703.0000	48.1982		46.5989
Maximum	12.0103	1.5088	0.1157	0.0058	0.2527	0.6285	5.8790	6.0165	2.3911	10832.0000	64.2080		65.3407
Average	12.0063	1.5056	0.1102	0.0055	0.2515	0.6226	5.8707	5.9861	2.2843	9414.1905	56.5685		56.8283
Standard Deviation	0.0029	0.0025	0.0030	0.0002	0.0006	0.0023	0.0036	0.0185	0.0655	906.2010	5.0142		5.4680
Coefficient of Variation (%)	0.02	0.16	2.75	2.75	0.26	0.36	0.06	0.31	2.87	9.63	8.86		9.62
No. Specimens	24	24	24	24	24	24	24	24	24	21	21		21

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	PB1	MH	RTD								

Test Group: AITR1392-ASU1-PB1-MH-RTD

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

Test Type: Single Shear Pin Bearing Layup 1 Condition: RTD #Plies: 24

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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB1-A-MH1-RTD-1	1.5095	0.1358	0.2514	0.7569	0.6296	0.6312	3.0107	6.004	1.852	113.02	126.77	100.45	108.78	B1I*	0.0057	130.39	103.31
AITR1392-ASU1-PB1-A-MH1-RTD-2	1.5092	0.1343	0.2512	0.7483	0.6270	0.6227	2.9789	6.008	1.871	122.22	124.17	96.76	108.73	B1I*	0.0056	126.30	98.42
AITR1392-ASU1-PB1-A-MH1-RTD-3	1.5091	0.1339	0.2512	0.7457	0.6269	0.6201	2.9686	6.008	1.876	117.75	130.22	85.77	97.05	B1I*	0.0056	132.12	87.03
AITR1392-ASU1-PB1-A-MH1-RTD-4	1.5093	0.1338	0.2512	0.7492	0.6282	0.6236	2.9825	6.008	1.878	NT					0.0056		
AITR1392-ASU1-PB1-A-MH2-RTD-1	1.5046	0.1337	0.2512	0.7481	0.6248	0.6225	2.9781	5.990	1.879	127.47	128.46	94.70	109.66	B1I*	0.0056	130.10	95.90
AITR1392-ASU1-PB1-A-MH2-RTD-2	1.5085	0.1356	0.2520	0.7525	0.6215	0.6265	2.9861	5.986	1.858	118.79	126.36	98.91	110.48	B1I*	0.0057	129.84	101.63
AITR1392-ASU1-PB1-A-MH2-RTD-3	1.5083	0.1348	0.2509	0.7502	0.6285	0.6247	2.9898	6.011	1.861	120.01	122.20	71.79	93.10	B1I*	0.0056	124.79	73.31
AITR1392-ASU1-PB1-A-MH2-RTD-4	1.5081	0.1344	0.2511	0.7488	0.6278	0.6232	2.9819	6.006	1.868	NT					0.0056		
AITR1392-ASU1-PB1-B-MH1-RTD-1	1.5070	0.1338	0.2514	0.7566	0.6263	0.6309	3.0095	5.994	1.879	123.36	124.82	94.43	101.47	B1I*	0.0056	126.50	95.70
AITR1392-ASU1-PB1-B-MH1-RTD-2	1.5070	0.1338	0.2522	0.7542	0.6214	0.6281	2.9905	5.975	1.886	119.37	124.75	103.79	111.88	B1I*	0.0056	126.40	105.16
AITR1392-ASU1-PB1-B-MH1-RTD-3	1.5063	0.1344	0.2517	0.7544	0.6269	0.6285	2.9970	5.985	1.873	114.08	129.29	90.03	108.33	B1I*	0.0056	131.59	91.63
AITR1392-ASU1-PB1-B-MH1-RTD-4	1.5061	0.1350	0.2509	0.7561	0.6250	0.6306	3.0134	6.003	1.859	NT					0.0056		
AITR1392-ASU1-PB1-B-MH2-RTD-1	1.5081	0.1312	0.2511	0.7474	0.6288	0.6218	2.9763	6.006	1.915	109.86	136.34	98.53	110.70	B1I	0.0055	135.46	97.90
AITR1392-ASU1-PB1-B-MH2-RTD-2	1.5082	0.1325	0.2513	0.7473	0.6289	0.6216	2.9735	6.001	1.897	117.03	133.10	94.82	106.49	B1I*	0.0055	133.61	95.18
AITR1392-ASU1-PB1-B-MH2-RTD-3	1.5086	0.1312	0.2517	0.7477	0.6174	0.6218	2.9704	5.994	1.919	109.60	132.29	97.58	105.82	B1I	0.0055	131.44	96.95
AITR1392-ASU1-PB1-B-MH2-RTD-4	1.5075	0.1326	0.2513	0.7501	0.6280	0.6244	2.9847	5.999	1.896	NT					0.0055		
AITR1392-ASU1-PB1-C-MH1-RTD-1	1.5089	0.1287	0.2510	0.7496	0.6258	0.6241	2.9865	6.012	1.950	111.59	122.22	93.94	105.67	B1I*	0.0054	119.16	91.60
AITR1392-ASU1-PB1-C-MH1-RTD-2	1.5088	0.1281	0.2511	0.7429	0.6306	0.6173	2.9584	6.009	1.960	117.19	129.39	81.01	98.54	B1I*	0.0053	125.60	78.64
AITR1392-ASU1-PB1-C-MH1-RTD-3	1.5089	0.1288	0.2512	0.7475	0.6290	0.6219	2.9757	6.007	1.951	114.66	126.98	94.44	110.36	B1I*	0.0054	123.89	92.13
AITR1392-ASU1-PB1-C-MH1-RTD-4	1.5085	0.1277	0.2512	0.7441	0.6289	0.6185	2.9622	6.005	1.967	NT					0.0053		
AITR1392-ASU1-PB1-C-MH2-RTD-1	1.5093	0.1277	0.2512	0.7474	0.6280	0.6218	2.9753	6.008	1.967	116.15	123.43	98.68	110.06	B1I*	0.0053	119.43	95.48
AITR1392-ASU1-PB1-C-MH2-RTD-2	1.5089	0.1292	0.2524	0.7532	0.6235	0.6270	2.9842	5.978	1.954	111.89	122.22	90.25	103.70	B1I*	0.0054	119.58	88.31
AITR1392-ASU1-PB1-C-MH2-RTD-3	1.5093	0.1283	0.2512	0.7574	0.6301	0.6318	3.0151	6.008	1.958	119.47	134.97	88.71	105.65	B1I*	0.0053	131.19	86.22
AITR1392-ASU1-PB1-C-MH2-RTD-4	1.5094	0.1294	0.2512	0.7585	0.6280	0.6329	3.0195	6.009	1.941	NT					0.0054		
Minimum	1.5046	0.1277	0.2509	0.7429	0.6174	0.6173	2.9584	5.9753	1.8517	109.6000	122.2010	71.7850	91.0150		0.0053	119.1597	73.3077
Maximum	1.5095	0.1358	0.2524	0.7585	0.6306	0.6329	3.0195	6.0117	1.9669	127.4670	136.3425	103.7890	111.8810		0.0057	135.4646	105.1650
Average	1.5082	0.1320	0.2513	0.7506	0.6267	0.6249	2.9862	6.0006	1.9047	116.8606	127.6662	93.0314	105.4957		0.0055	127.6336	93.0274
Standard Deviation	0.0012	0.0028	0.0004	0.0044	0.0031	0.0044	0.0169	0.0107	0.0405	4.8078	4.4149	7.6571	6.1310		0.0001	4.9309	8.1411
Coefficient of Variation (%)	0.08	2.12	0.15	0.59	0.50	0.70	0.56	0.18	2.12	4.11	3.46	8.23	5.81		2.12	3.86	8.75
No. Specimens	24	24	24	24	24	24	24	24	24	18	18	18	18		24	18	18

Notes:

NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition								
	AITR	1392	ASU1	PB1	MH	ETW2								

Test Group: AITR1392-ASU1-PB1-MH-ETW2

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

Test Type: Single Shear Pin Bearing Layup 1 Condition: ETW2 #Plies: 24

Test Method: MP1120 (ASTMD5961)

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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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB1-A-MH1-ETW2-1	1.5108	0.1372	0.2511	0.7481	0.6285	0.6225	2.9791	6.017	1.831	NT					0.0057		
AITR1392-ASU1-PB1-A-MH1-ETW2-2	1.5092	0.1337	0.2505	0.7453	0.6270	0.6200	2.9750	6.025	1.874	71.98	86.10	71.11	77.27	B1I	0.0056	87.19	72.01
AITR1392-ASU1-PB1-A-MH1-ETW2-3	1.5094	0.1339	0.2513	0.7447	0.6275	0.6190	2.9632	6.006	1.876	68.50	89.52	67.53	72.16	B1I	0.0056	90.83	68.52
AITR1392-ASU1-PB1-A-MH1-ETW2-4	1.5088	0.1354	0.2514	0.7527	0.6215	0.6270	2.9940	6.001	1.857	88.65	100.55	80.60	86.36	B1I	0.0056	103.12	82.66
AITR1392-ASU1-PB1-A-MH2-ETW2-1	1.5049	0.1359	0.2515	0.7443	0.6235	0.6185	2.9592	5.984	1.850	80.05	90.59	74.74	79.05	B1I	0.0057	93.29	76.97
AITR1392-ASU1-PB1-A-MH2-ETW2-2	1.5088	0.1355	0.2514	0.7552	0.6260	0.6295	3.0040	6.001	1.855	93.01	93.83	64.16	76.69	B1I	0.0056	96.34	65.88
AITR1392-ASU1-PB1-A-MH2-ETW2-3	1.5015	0.1357	0.2515	0.7443	0.6200	0.6185	2.9592	5.970	1.853	84.21	93.00	78.98	82.73	B1I	0.0057	95.61	81.19
AITR1392-ASU1-PB1-A-MH2-ETW2-4	1.5093	0.1346	0.2511	0.7501	0.6260	0.6245	2.9871	6.011	1.865	86.63	97.70	78.83	85.51	B1I	0.0056	99.65	80.41
AITR1392-ASU1-PB1-B-MH1-ETW2-1	1.5070	0.1342	0.2525	0.7558	0.6225	0.6295	2.9931	5.968	1.882	NT					0.0056		
AITR1392-ASU1-PB1-B-MH1-ETW2-2	1.5064	0.1373	0.2514	0.7452	0.6235	0.6195	2.9642	5.992	1.831	92.70	92.71	78.49	82.31	B1I	0.0057	96.43	81.65
AITR1392-ASU1-PB1-B-MH1-ETW2-3	1.5070	0.1374	0.2526	0.7543	0.6235	0.6280	2.9861	5.966	1.839	NT					0.0057		
AITR1392-ASU1-PB1-B-MH1-ETW2-4	1.5075	0.1371	0.2517	0.7554	0.6235	0.6295	3.0010	5.989	1.836	78.19	96.99	74.67	76.18	B1I	0.0057	100.74	77.56
AITR1392-ASU1-PB1-B-MH2-ETW2-1	1.5101	0.1324	0.2511	0.7471	0.6245	0.6215	2.9751	6.014	1.896	92.61	92.59	76.19	82.25	B1I	0.0055	92.89	76.44
AITR1392-ASU1-PB1-B-MH2-ETW2-2	1.5091	0.1321	0.2515	0.7453	0.6190	0.6195	2.9632	6.000	1.904	82.52	96.26	80.88	85.17	B1I	0.0055	96.33	80.94
AITR1392-ASU1-PB1-B-MH2-ETW2-3	1.5099	0.1314	0.2520	0.7480	0.6255	0.6220	2.9683	5.992	1.918	75.74	97.30	80.09	78.60	B1I*	0.0055	96.86	79.72
AITR1392-ASU1-PB1-B-MH2-ETW2-4	1.5101	0.1321	0.2515	0.7483	0.6260	0.6225	2.9751	6.005	1.904	91.84	94.09	79.23	84.79	B1I	0.0055	94.16	79.29
AITR1392-ASU1-PB1-C-MH1-ETW2-1	1.5103	0.1300	0.2521	0.7566	0.6245	0.6305	3.0010	5.991	1.939	86.82	92.64	86.23	85.20	B1I	0.0054	91.26	84.95
AITR1392-ASU1-PB1-C-MH1-ETW2-2	1.5103	0.1290	0.2521	0.7566	0.6225	0.6305	3.0010	5.991	1.955	86.83	100.64	82.62	86.41	B1I	0.0054	98.33	80.72
AITR1392-ASU1-PB1-C-MH1-ETW2-3	1.5103	0.1310	0.2522	0.7536	0.6215	0.6275	2.9881	5.989	1.926	101.97	102.00	83.50	90.17	B1I	0.0055	101.20	82.85
AITR1392-ASU1-PB1-C-MH1-ETW2-4	1.5106	0.1279	0.2514	0.7432	0.6255	0.6175	2.9562	6.009	1.966	91.11	94.69	76.17	85.87	B1I	0.0053	91.73	73.79
AITR1392-ASU1-PB1-C-MH2-ETW2-1	1.5106	0.1309	0.2514	0.7432	0.6250	0.6175	2.9562	6.009	1.921	87.64	97.94	83.20	86.94	B1I	0.0055	97.12	82.51
AITR1392-ASU1-PB1-C-MH2-ETW2-2	1.5108	0.1303	0.2512	0.7431	0.6260	0.6175	2.9582	6.014	1.928	80.06	92.45	75.95	78.21	B1I*	0.0054	91.26	74.97
AITR1392-ASU1-PB1-C-MH2-ETW2-3	1.5107	0.1300	0.2513	0.7552	0.6270	0.6295	3.0050	6.012	1.933	78.12	97.71	78.12	82.90	B1I	0.0054	96.26	76.95
AITR1392-ASU1-PB1-C-MH2-ETW2-4	1.5102	0.1292	0.2515	0.7478	0.6160	0.6220	2.9732	6.005	1.947	75.91	90.39	74.81	76.83	B1I	0.0054	88.47	73.23
Minimum	1.5015	0.1279	0.2505	0.7431	0.6160	0.6175	2.9562	5.9661	1.8306	68.4990	86.1021	64.1640	72.1640		0.0053	87.1893	65.8815
Maximum	1.5108	0.1374	0.2526	0.7566	0.6285	0.6305	3.0050	6.0248	1.9661	101.9730	101.9988	86.2330	90.1700		0.0057	103.1195	84.9482
Average	1.5089	0.1331	0.2516	0.7493	0.6240	0.6235	2.9786	5.9983	1.8910	84.5279	94.7478	77.4334	81.9805		0.0055	95.1939	77.7703
Standard Deviation	0.0022	0.0029	0.0005	0.0049	0.0029	0.0048	0.0168	0.0156	0.0423	8.1800	4.0237	5.2620	4.6305		0.0001	4.1983	4.9489
Coefficient of Variation (%)	0.15	2.21	0.19	0.66	0.47	0.77	0.57	0.26	2.24	9.68	4.25	6.80	5.65		2.21	4.41	6.36
No. Specimens	24	24	24	24	24	24	24	24	24	21	21	21	21		24	21	21

Notes:

NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition								
	AITR	1392	ASU1	PB2	MH	RTD								

Test Group: AITR1392-ASU1-PB2-MH-RTD

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

Test Type: Single Shear Pin Bearing Layup 2 Condition: RTD #Plies: 20

Test Method: MP1120 (ASTMD5961)

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Laboratory Report

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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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB2-A-MH1-RTD-1	1.5095	0.1106	0.2512	0.7503	0.6236	0.6247	2.9869	6.009	2.271	68.41	109.24	63.48	81.86	B1I	0.0055	109.87	63.84
AITR1392-ASU1-PB2-A-MH1-RTD-2	1.5093	0.1106	0.2511	0.7508	0.6305	0.6252	2.9898	6.011	2.271	70.64	106.62	66.41	75.29	B1I	0.0055	107.16	66.75
AITR1392-ASU1-PB2-A-MH1-RTD-3	1.5091	0.1116	0.2516	0.7499	0.6200	0.6241	2.9805	5.998	2.255	57.83	106.71	55.41	75.99	B1I	0.0056	108.22	56.19
AITR1392-ASU1-PB2-A-MH1-RTD-4	1.5094	0.1119	0.2507	0.7487	0.6303	0.6233	2.9862	6.021	2.241	NT					0.0056		
AITR1392-ASU1-PB2-A-MH2-RTD-1	1.4954	0.1105	0.2508	0.7505	0.6305	0.6251	2.9924	5.963	2.271	69.64	112.31	65.66	81.45	B1I	0.0055	112.77	65.93
AITR1392-ASU1-PB2-A-MH2-RTD-2	1.4956	0.1105	0.2505	0.7471	0.6306	0.6218	2.9822	5.971	2.266	70.15	112.03	65.25	76.49	B1I	0.0055	112.57	65.56
AITR1392-ASU1-PB2-A-MH2-RTD-3	1.4951	0.1106	0.2514	0.7582	0.6285	0.6325	3.0159	5.947	2.273	62.09	116.98	59.90	61.35	B1I	0.0055	117.60	60.22
AITR1392-ASU1-PB2-A-MH2-RTD-4	1.4946	0.1102	0.2519	0.7541	0.6310	0.6281	2.9934	5.933	2.286						0.0055		
Minimum	1.4946	0.1102	0.2505	0.7471	0.6200	0.6218	2.9805	5.9334	2.2414	57.8300	106.6156	55.4140	61.3530		0.0055	107.1648	56.1948
Maximum	1.5095	0.1119	0.2519	0.7582	0.6310	0.6325	3.0159	6.0206	2.2858	70.6370	116.9757	66.4090	81.8640		0.0056	117.5960	66.7511
Average	1.5023	0.1108	0.2512	0.7512	0.6281	0.6256	2.9909	5.9815	2.2668	66.4595	110.6477	62.6843	75.2890		0.0055	111.3652	63.0828
Standard Deviation	0.0076	0.0006	0.0005	0.0035	0.0041	0.0033	0.0111	0.0325	0.0132	5.2647	3.9604	4.2543	7.4405		0.00003	3.7956	4.0963
Coefficient of Variation (%)	0.50	0.52	0.19	0.46	0.65	0.53	0.37	0.54	0.58	7.92	3.58	6.79	9.88		0.52	3.41	6.49
No. Specimens	8	8	8	8	8	8	8	8	8	6	6	6	6		8	6	6

Notes:
NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition								
	AITR	1392	ASU1	PB2	MH	ETW2								

Test Group: AITR1392-ASU1-PB2-MH-ETW2

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

Test Type: Single Shear Pin Bearing Layup 2 Condition: ETW2 #Plies: 20

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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB2-A-MH1-ETW2-1	1.5099	0.1108	0.2515	0.7463	0.6270	0.6205	2.9672	6.003	2.270	71.85	96.82	75.23	81.71	B1I	0.0055	97.52	75.78
AITR1392-ASU1-PB2-A-MH1-ETW2-2	1.5101	0.1133	0.2515	0.7458	0.6260	0.6200	2.9652	6.005	2.220	82.75	90.29	76.12	79.74	B1I	0.0057	92.97	78.38
AITR1392-ASU1-PB2-A-MH1-ETW2-3	1.5099	0.1106	0.2517	0.7509	0.6270	0.6250	2.9831	5.999	2.276	78.91	89.98	77.93	78.66	B1I	0.0055	90.44	78.33
AITR1392-ASU1-PB2-A-MH1-ETW2-4	1.5104	0.1121	0.2518	0.7499	0.6250	0.6240	2.9782	5.998	2.246	85.33	95.52	71.42	76.36	B1I	0.0056	97.37	72.80
AITR1392-ASU1-PB2-A-MH2-ETW2-1	1.4961	0.1126	0.2514	0.7487	0.6185	0.6230	2.9781	5.951	2.232	70.56	88.11	69.93	77.68	B1I	0.0056	90.22	71.60
AITR1392-ASU1-PB2-A-MH2-ETW2-2	1.4968	0.1141	0.2516	0.7458	0.6170	0.6200	2.9642	5.949	2.204	82.89	94.62	70.77	81.16	B1I	0.0057	98.17	73.43
AITR1392-ASU1-PB2-A-MH2-ETW2-3	1.4959	0.1110	0.2516	0.7478	0.6135	0.6220	2.9722	5.946	2.266	81.96	88.67	71.86	74.53	B1I	0.0056	89.50	72.54
AITR1392-ASU1-PB2-A-MH2-ETW2-4	1.4963	0.1122	0.2519	0.7470	0.6140	0.6210	2.9653	5.940	2.246	83.18	94.21	72.99	81.16	B1I	0.0056	96.07	74.42
AITR1392-ASU1-PB2-B-MH1-ETW2-1	1.5093	0.1123	0.2518	0.7479	0.6300	0.6220	2.9702	5.994	2.242	90.15	91.31	70.37	74.33	B1I	0.0056	93.22	71.84
AITR1392-ASU1-PB2-B-MH1-ETW2-2	1.5092	0.1120	0.2518	0.7540	0.6272	0.6281	2.9944	5.994	2.249	74.96	89.76	74.90	73.79	B1I	0.0056	91.38	76.25
AITR1392-ASU1-PB2-B-MH1-ETW2-3	1.5092	0.1119	0.2528	0.7567	0.6307	0.6303	2.9933	5.970	2.258	78.29	83.76	74.65	77.22	B1I	0.0056	85.23	75.96
AITR1392-ASU1-PB2-B-MH1-ETW2-4	1.5093	0.1126	0.2517	0.7519	0.6320	0.6260	2.9871	5.997	2.236	88.99	93.78	75.78	77.33	B1I	0.0056	95.97	77.55
AITR1392-ASU1-PB2-B-MH2-ETW2-1	1.5082	0.1052	0.2516	0.7593	0.6276	0.6335	3.0179	5.994	2.391	92.35	96.27	75.92	80.58	B1I	0.0053	92.10	72.63
AITR1392-ASU1-PB2-B-MH2-ETW2-2	1.5084	0.1056	0.2517	0.7594	0.6266	0.6335	3.0169	5.993	2.383	89.08	105.67	85.06	87.86	B1I	0.0053	101.46	81.67
AITR1392-ASU1-PB2-B-MH2-ETW2-3	1.5083	0.1059	0.2515	0.7518	0.6180	0.6260	2.9891	5.997	2.375	86.44	88.75	74.13	79.12	B1I	0.0053	85.45	71.38
AITR1392-ASU1-PB2-B-MH2-ETW2-4	1.5084	0.1058	0.2516	0.7598	0.6252	0.6340	3.0199	5.995	2.378	80.24	93.41	79.36	84.22	B1I	0.0053	89.86	76.34
AITR1392-ASU1-PB2-C-MH1-ETW2-1	1.5078	0.1068	0.2520	0.7510	0.6270	0.6250	2.9802	5.983	2.359	80.04	94.03	73.66	78.78	B1I	0.0053	91.31	71.53
AITR1392-ASU1-PB2-C-MH1-ETW2-2	1.5079	0.1071	0.2505	0.7488	0.6270	0.6235	2.9890	6.019	2.340	88.10	97.03	75.09	86.22	B1I	0.0054	94.43	73.08
AITR1392-ASU1-PB2-C-MH1-ETW2-3	1.5079	0.1058	0.2505	0.7503	0.6275	0.6250	2.9950	6.019	2.368	85.34	98.89	84.49	84.59	B1I	0.0053	95.12	81.27
AITR1392-ASU1-PB2-C-MH1-ETW2-4	1.5063	0.1058	0.2525	0.7508	0.6255	0.6245	2.9733	5.966	2.387	81.64	94.17	80.60	80.12	B1I	0.0053	90.55	77.50
AITR1392-ASU1-PB2-C-MH2-ETW2-1	1.5067	0.1060	0.2520	0.7505	0.6275	0.6245	2.9782	5.979	2.377	82.87	93.09	82.87	86.89	B1I	0.0053	89.72	79.87
AITR1392-ASU1-PB2-C-MH2-ETW2-2	1.5061	0.1066	0.2515	0.7508	0.6275	0.6250	2.9851	5.988	2.360	89.20	89.23	70.18	70.47	B1I	0.0053	86.43	67.97
AITR1392-ASU1-PB2-C-MH2-ETW2-3	1.5061	0.1062	0.2515	0.7488	0.6260	0.6230	2.9771	5.988	2.367	92.84	94.81	73.36	78.27	B1I	0.0053	91.56	70.85
AITR1392-ASU1-PB2-C-MH2-ETW2-4	1.5067	0.1068	0.2515	0.7488	0.6275	0.6230	2.9771	5.991	2.354	83.94	103.58	80.42	80.42	B1I	0.0053	100.60	78.11
Minimum	1.4959	0.1052	0.2505	0.7458	0.6135	0.6200	2.9642	5.9401	2.2044	70.5610	83.7552	69.9250	70.4660		0.0053	85.2273	67.9741
Maximum	1.5104	0.1141	0.2528	0.7598	0.6320	0.6340	3.0199	6.0194	2.3909	92.8350	105.6662	85.0590	87.8600		0.0057	101.4556	81.6695
Average	1.5063	0.1091	0.2516	0.7509	0.6250	0.6251	2.9840	5.9858	2.3077	83.4127	93.5725	75.7110	79.6317		0.0055	92.7764	75.0439
Standard Deviation	0.0047	0.0032	0.0005	0.0041	0.0050	0.0041	0.0161	0.0217	0.0660	5.8769	4.8812	4.4364	4.2831		0.0002	4.3801	3.5727
Coefficient of Variation (%)	0.31	2.90	0.19	0.55	0.80	0.65	0.54	0.36	2.86	7.05	5.22	5.86	5.38		2.90	4.72	4.76
No. Specimens	24	24	24	24	24	24	24	24	24	24	24	24	24		24	24	24

Notes:

NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition								
	AITR	1392	ASU1	PB3	MH	RTD								

Test Group: AITR1392-ASU1-PB3-MH-RTD

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

Test Type: Single Shear Pin Bearing Layup 3 Condition: RTD #Plies: 20

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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB3-A-MH1-RTD-1	1.5061	0.1104	0.2512	0.7509	0.6292	0.6253	2.9893	5.996	2.275	60.55	103.09	62.62	78.61	B1I	0.0055	103.47	62.84
AITR1392-ASU1-PB3-A-MH1-RTD-2	1.5059	0.1106	0.2524	0.7547	0.6251	0.6285	2.9901	5.966	2.283	101.59	102.64	63.91	86.31	B1I	0.0055	103.16	64.23
AITR1392-ASU1-PB3-A-MH1-RTD-3	1.5057	0.1107	0.2518	0.7561	0.6259	0.6302	3.0028	5.980	2.275	58.03	109.09	62.30	80.83	B1I	0.0055	109.76	62.67
AITR1392-ASU1-PB3-A-MH1-RTD-4	1.5060	0.1114	0.2511	0.7431	0.6271	0.6175	2.9592	5.998	2.255	NT					0.0056		
AITR1392-ASU1-PB3-A-MH2-RTD-1	1.5056	0.1109	0.2508	0.7450	0.6289	0.6196	2.9705	6.003	2.263	72.32	113.30	85.22	91.08	B1I	0.0055	114.18	85.88
AITR1392-ASU1-PB3-A-MH2-RTD-2	1.5059	0.1109	0.2523	0.7547	0.6255	0.6285	2.9911	5.969	2.275	92.63	105.59	72.18	79.21	B1I	0.0055	106.44	72.75
AITR1392-ASU1-PB3-A-MH2-RTD-3	1.5055	0.1117	0.2509	0.7467	0.6285	0.6212	2.9759	6.000	2.246	60.53	104.34	61.07	86.31	B1I	0.0056	105.98	62.03
AITR1392-ASU1-PB3-A-MH2-RTD-4	1.5051	0.1114	0.2510	0.7497	0.6283	0.6242	2.9869	5.997	2.253	NT					0.0056		
Minimum	1.5051	0.1104	0.2508	0.7431	0.6251	0.6175	2.9592	5.9662	2.2455	58.0290	102.6420	61.0680	78.6120		0.0055	103.1552	62.0303
Maximum	1.5061	0.1117	0.2524	0.7561	0.6292	0.6302	3.0028	6.0033	2.2831	101.5890	113.3045	85.2230	91.0780		0.0056	114.1801	85.8815
Average	1.5057	0.1110	0.2514	0.7501	0.6273	0.6244	2.9832	5.9885	2.2657	74.2727	106.3436	67.8805	83.7250		0.0055	107.1631	68.4014
Standard Deviation	0.0003	0.0005	0.0006	0.0049	0.0016	0.0046	0.0138	0.0148	0.0134	18.5908	4.1203	9.3843	4.9476		0.00002	4.1857	9.4472
Coefficient of Variation (%)	0.02	0.42	0.25	0.65	0.26	0.74	0.46	0.25	0.59	25.03	3.87	13.82	5.91		0.42	3.91	13.81
No. Specimens	8	8	8	8	8	8	8	8	8	6	6	6	6		8	6	6

Notes:

NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition								
	AITR	1392	ASU1	PB3	MH	ETW2								

Test Group: AITR1392-ASU1-PB3-MH-ETW2

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

Test Type: Single Shear Pin Bearing Layup 3 Condition: ETW2 #Plies: 20

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				Failure Mode	Cured Ply Thickness	Ultimate Strength, ksi	2% Offset Strength, ksi
										Initial Peak	Ultimate	2% Offset	4% Offset				
AITR1392-ASU1-PB3-A-MH1-ETW2-1	1.5071	0.1117	0.2514	0.7507	0.6250	0.6250	2.9861	5.995	2.251	74.61	89.69	74.19	79.83	B1I	0.0056	91.05	75.32
AITR1392-ASU1-PB3-A-MH1-ETW2-2	1.5077	0.1127	0.2513	0.7527	0.6240	0.6270	2.9950	6.000	2.230	72.28	90.81	76.45	81.07	B1I	0.0056	93.01	78.30
AITR1392-ASU1-PB3-A-MH1-ETW2-3	1.5079	0.1132	0.2507	0.7504	0.6250	0.6250	2.9930	6.015	2.215	84.68	93.34	79.59	82.29	B1I	0.0057	96.02	81.88
AITR1392-ASU1-PB3-A-MH1-ETW2-4	1.5072	0.1121	0.2521	0.7476	0.6250	0.6215	2.9653	5.979	2.248	77.52	93.99	76.26	78.81	B1I	0.0056	95.81	77.74
AITR1392-ASU1-PB3-A-MH2-ETW2-1	1.5074	0.1134	0.2515	0.7468	0.6250	0.6210	2.9692	5.994	2.218	75.23	90.99	76.32	80.94	B1I	0.0057	93.80	78.67
AITR1392-ASU1-PB3-A-MH2-ETW2-2	1.5071	0.1121	0.2526	0.7518	0.6225	0.6255	2.9762	5.966	2.253	80.51	94.96	75.26	79.96	B1I	0.0056	96.78	76.70
AITR1392-ASU1-PB3-A-MH2-ETW2-3	1.5078	0.1126	0.2514	0.7432	0.6245	0.6175	2.9562	5.998	2.233	73.32	93.61	74.25	79.30	B1I	0.0056	95.79	75.98
AITR1392-ASU1-PB3-A-MH2-ETW2-4	1.5075	0.1130	0.2525	0.7553	0.6245	0.6290	2.9911	5.970	2.235	77.43	91.64	73.68	70.07	B1I	0.0056	94.11	75.67
AITR1392-ASU1-PB3-B-MH1-ETW2-1	1.5088	0.1112	0.2519	0.7450	0.6290	0.6190	2.9573	5.990	2.265	73.97	93.73	72.42	82.28	B1I	0.0056	94.77	73.22
AITR1392-ASU1-PB3-B-MH1-ETW2-2	1.5084	0.1108	0.2521	0.7556	0.6281	0.6295	2.9970	5.983	2.275	86.92	92.40	84.76	80.93	B1I	0.0055	93.07	85.37
AITR1392-ASU1-PB3-B-MH1-ETW2-3	1.5085	0.1118	0.2513	0.7467	0.6295	0.6210	2.9712	6.003	2.248	68.28	87.99	72.06	81.67	B1I	0.0056	89.43	73.24
AITR1392-ASU1-PB3-B-MH1-ETW2-4	1.5087	0.1103	0.2514	0.7452	0.6280	0.6195	2.9642	6.001	2.280	75.09	92.91	75.60	80.84	B1I	0.0055	93.15	75.80
AITR1392-ASU1-PB3-B-MH2-ETW2-1	1.5083	0.1035	0.2522	0.7500	0.6269	0.6239	2.9738	5.981	2.437	82.69	96.17	82.69	80.76	B1I	0.0052	90.48	77.79
AITR1392-ASU1-PB3-B-MH2-ETW2-2	1.5075	0.1052	0.2519	0.7499	0.6269	0.6239	2.9768	5.985	2.395	72.76	92.33	62.12	72.62	B1I	0.0053	88.27	59.39
AITR1392-ASU1-PB3-B-MH2-ETW2-3	1.5077	0.1039	0.2522	0.7497	0.6250	0.6236	2.9726	5.978	2.429	77.41	91.79	72.50	75.04	B1I	0.0052	86.66	68.45
AITR1392-ASU1-PB3-B-MH2-ETW2-4	1.5077	0.1044	0.2521	0.7501	0.6270	0.6240	2.9752	5.981	2.416	83.15	95.70	65.30	83.15	B1I	0.0052	90.80	61.95
AITR1392-ASU1-PB3-C-MH1-ETW2-1	1.5077	0.1093	0.2518	0.7524	0.6250	0.6265	2.9881	5.988	2.303	NT					0.0055		
AITR1392-ASU1-PB3-C-MH1-ETW2-2	1.5072	0.1067	0.2516	0.7463	0.6295	0.6205	2.9662	5.990	2.359	81.42	100.32	74.25	79.88	B1I	0.0053	97.27	71.99
AITR1392-ASU1-PB3-C-MH1-ETW2-3	1.5074	0.1082	0.2518	0.7598	0.6277	0.6339	3.0175	5.986	2.328	78.45	88.35	76.29	72.84	B1I	0.0054	86.87	75.00
AITR1392-ASU1-PB3-C-MH1-ETW2-4	1.5079	0.1074	0.2516	0.7600	0.6264	0.6342	3.0207	5.993	2.342	82.94	97.79	76.02	81.77	B1I	0.0054	95.50	74.24
AITR1392-ASU1-PB3-C-MH2-ETW2-1	1.5074	0.1066	0.2520	0.7485	0.6285	0.6225	2.9702	5.982	2.364	77.93	96.27	79.45	88.67	B1I	0.0053	93.29	77.00
AITR1392-ASU1-PB3-C-MH2-ETW2-2	1.5075	0.1064	0.2518	0.7499	0.6280	0.6240	2.9782	5.987	2.366	79.21	104.42	78.35	78.40	B1I	0.0053	101.02	75.79
AITR1392-ASU1-PB3-C-MH2-ETW2-3	1.5072	0.1065	0.2512	0.7541	0.6270	0.6285	3.0020	6.000	2.360	79.39	89.15	79.02	74.98	B1I	0.0053	86.28	76.47
AITR1392-ASU1-PB3-C-MH2-ETW2-4	1.5062	0.1080	0.2518	0.7534	0.6280	0.6275	2.9921	5.982	2.333	78.75	90.39	77.82	77.83	B1I	0.0054	88.71	76.37
Minimum	1.5062	0.1035	0.2507	0.7432	0.6225	0.6175	2.9562	5.9662	2.2153	68.2810	87.9861	62.1170	70.0650		0.0052	86.2768	59.3876
Maximum	1.5088	0.1134	0.2526	0.7600	0.6295	0.6342	3.0207	6.0148	2.4371	86.9240	104.4197	84.7560	88.6680		0.0057	101.0181	85.3724
Average	1.5077	0.1092	0.2518	0.7506	0.6265	0.6247	2.9815	5.9885	2.3077	77.9967	93.4241	75.4188	79.3010		0.0055	92.6925	74.8836
Standard Deviation	0.0006	0.0033	0.0004	0.0043	0.0019	0.0043	0.0171	0.0110	0.0707	4.4760	3.8674	4.8627	4.0330		0.0002	3.8282	5.5631
Coefficient of Variation (%)	0.04	2.98	0.17	0.58	0.30	0.69	0.57	0.18	3.07	5.74	4.14	6.45	5.09		2.98	4.13	7.43
No. Specimens	24	24	24	24	24	24	24	24	24	23	23	23	23		24	23	23

Notes:

NT=Not Tested
NR=No Result
NA=Not Applicable
GE=Gage Error
*=Test Terminated at 50% Extension

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	ASU1	ILT1	MH	RTD						

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

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

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

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-ASU1-ILT1-A-MH1-RTD-1	0.1868	1.0065	0.2590	0.4458	90.0000	0.8980	29.3668	0.383	456.000	227.96	5.39	ILT	0.0058	5.72
AITR1392-ASU1-ILT1-A-MH1-RTD-2	0.1892	1.0062	0.2500	0.4392	90.0000	1.0309	36.0960	0.253	492.000	307.38	7.36	ILT	0.0059	7.91
AITR1392-ASU1-ILT1-A-MH1-RTD-3	0.1855	1.0063	0.2550	0.4405	90.0000	1.0531	37.2707	0.226	416.000	270.23	6.52	ILT	0.0058	6.87
AITR1392-ASU1-ILT1-A-MH1-RTD-4	0.1882	1.0073	0.2550	0.4432	90.0000	1.0410	36.6052	0.242	448.000	284.44	6.75	ILT	0.0059	7.21
AITR1392-ASU1-ILT1-A-MH1-RTD-5	0.1833	1.0060	0.2550	0.4383	90.0000	1.0126	35.5200	0.263	489.000	298.24	7.30	ILT	0.0057	7.60
AITR1392-ASU1-ILT1-A-MH1-RTD-6	0.1867	1.0058	0.2550	0.4417	90.0000	0.9871	34.1237	0.294	576.000	335.80	8.04	ILT	0.0058	8.53
AITR1392-ASU1-ILT1-A-MH1-RTD-7														
AITR1392-ASU1-ILT1-A-MH1-RTD-8														
Minimum	0.1833	1.0058	0.2500	0.4383	90.0000	0.8980	29.3668	0.2261	416.0000	227.96	5.3860		0.0057	5.7175
Maximum	0.1892	1.0073	0.2590	0.4458	90.0000	1.0531	37.2707	0.3830	576.0000	335.80	8.0407		0.0059	8.5280
Average	0.1866	1.0064	0.2548	0.4414	90.0000	1.0038	34.8304	0.2769	479.5000	287.34	6.8910		0.0058	7.3063
Standard Deviation	0.0020	0.0005	0.0029	0.0028	0.0000	0.0567	2.8821	0.0567	55.0191	36.59	0.9086		0.0001	0.9656
Coefficient of Variation (%)	1.10	0.05	1.12	0.62	0.00	5.65	8.27	20.48	11.47	12.74	13.19		1.10	13.22
No. Specimens	6	6	6	6	6	6	6	6	6	6	6		6	6

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	MH	ETW2						

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

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

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

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-ASU1-ILT1-A-MH1-ETW2-1	0.1848	1.0057	0.2500	0.4348	89.0000	1.1019	39.3829	0.161	258.000	181.14	4.46	ILT	0.0058	4.68
AITR1392-ASU1-ILT1-A-MH1-ETW2-2	0.1895	1.0057	0.2500	0.4395	90.0000	1.1307	40.3419	0.154	234.000	170.99	4.08	ILT	0.0059	4.40
AITR1392-ASU1-ILT1-A-MH1-ETW2-3	0.1902	1.0087	0.2500	0.4402	90.0000	1.1533	41.1891	0.132	183.000	137.84	3.28	ILT	0.0059	3.54
AITR1392-ASU1-ILT1-A-MH1-ETW2-4	0.1902	1.0092	0.2500	0.4402	90.0000	1.1432	40.8011	0.143	216.000	160.18	3.81	ILT	0.0059	4.12
AITR1392-ASU1-ILT1-A-MH1-ETW2-5	0.1887	1.0087	0.2500	0.4387	90.0000	1.1411	40.7826	0.143	219.000	162.18	3.89	ILT	0.0059	4.17
AITR1392-ASU1-ILT1-A-MH1-ETW2-6	0.1948	1.0088	0.2500	0.4448	90.0000	1.1426	40.5797	0.150	226.000	166.81	3.85	ILT	0.0061	4.26
AITR1392-ASU1-ILT1-A-MH1-ETW2-7														
AITR1392-ASU1-ILT1-A-MH1-ETW2-8														
Minimum	0.1848	1.0057	0.2500	0.4348	89.0000	1.1019	39.3829	0.1325	183.0000	137.84	3.2777		0.0058	3.5415
Maximum	0.1948	1.0092	0.2500	0.4448	90.0000	1.1533	41.1891	0.1611	258.0000	181.14	4.4585		0.0061	4.6823
Average	0.1897	1.0078	0.2500	0.4397	89.8333	1.1355	40.5129	0.1471	222.6667	163.19	3.8955		0.0059	4.1954
Standard Deviation	0.0032	0.0016	0.0000	0.0032	0.4082	0.0179	0.6203	0.0101	24.5737	14.48	0.3856		0.0001	0.3786
Coefficient of Variation (%)	1.69	0.16	0.00	0.73	0.45	1.58	1.53	6.84	11.04	8.87	9.90		1.69	9.02
No. Specimens	6	6	6	6	6	6	6	6	6	6	6		6	6

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

DATA REDUCTION TABLE FOR SACMA SRM 2R-94
COMPRESSION AFTER IMPACT PROPERTIES OF ORIENTED FIBER-RESIN COMPOSITES

BATCH NAME:ADKA 11XA

Orientation
[0,45,90,-45]4S

ACG CODE	SPECIMEN #	CURE CYCLE	Avg. Thick (in)	Avg. Width (in)	H (in)	Nominal Energy Level (lb-in/in)	Measured Impact Energy (lb-in)	Initial Load Offset (lb)	Max Load (lb)	C.A.I STRENGTH [ksi]	Modulus (Msi)	Final Strain (microstrain)	Temp/Humidity °F / % RH	Comments / Failure Mode	Normalized CPT	Normalized Strength [ksi]	Normalized Modulus [Msi]
ADKA11XA	ASU1-CAI1-A-MH1-RTD-1	1	0.181	3.997	6.003	271.950	268.520	0	18921.962	26.112	6.832	4755.703	76 F / 50%	LDM	0.005666	26.898	7.038
	ASU1-CAI1-A-MH1-RTD-2	1	0.181	3.997	6.004	271.350	270.980	0	21989.811	30.413	6.856	4703.627	76 F / 50%	LDM	0.005653	31.260	7.047
	ASU1-CAI1-A-MH1-RTD-3	1	0.181	3.996	6.003	271.200	271.230	0	22502.922	31.145	6.789	4872.193	76 F / 50%	LDM	0.005650	31.995	6.974
	ASU1-CAI1-A-MH1-RTD-4	1	0.181	3.998	6.004	270.750	271.740	0	22967.785	31.826	6.817	4959.685	76 F / 50%	LDM	0.005641	32.639	6.991
	ASU1-CAI1-A-MH1-RTD-5	1	0.180	3.996	6.006	270.000	271.510	0	23597.615	32.807	6.878	5062.704	76 F / 50%	LDM	0.005625	33.553	7.034
	ASU1-CAI1-A-MH1-RTD-6	1	0.181	3.991	6.006	271.800	271.750	0	22112.138	30.575	6.798	4778.573	76 F / 50%	LDM	0.005663	31.479	6.999
	ASU1-CAI1-A-MH1-RTD-7	1	0.182	3.996	6.006	272.550	271.550	0	20989.085	28.906	6.765	4536.510	76 F / 50%	LDM	0.005678	29.842	6.984

LOAD FRAME CAPACITY	110	kips
LOAD CELL	110000	lbs
STR.GAGE/EXT.MTR I.D	CEA-06-250UN-120	
GAUGE FACTOR	2.105	
EXCITATION VOLTAGE	5	volts
GAUGE RESISTANCE	350	ohms

	NAME	DATE
DIMENSIONING	ACG	
TESTING	KYLE/EVAN	06/19/07
DATA ENTRY/REDUCTION	DAVE	06/21/07

IMPACTOR WEIGHT	13.81	lbs
IMPACTOR DIAMETER	0.625	in
DROP HEIGHT	19.66	in

AVERAGE **C.A.I. STRENGTH** [ksi] **30.255**
STANDARD DEVIATION [ksi] 2.194
COEFFICIENT OF VARIATION [%] 7.253

AVERAGE **MODULUS** [Msi] **6.819**
STANDARD DEVIATION [Msi] 0.039
COEFFICIENT OF VARIATION [%] 0.577

AVERAGE **FAILURE STRAIN** [micro strain] **4809.856**
STANDARD DEVIATION [micro strain] 173.292
COEFFICIENT OF VARIATION [%] 3.603

	CPT	Strength [ksi]	Modulus [Msi]
Average	0.005654	31.095	7.010
Standard Deviation		2.183	0.029
Coefficient of Variation (%)		7.021	0.418
Maximum	0.005678	33.553	7.047
Minimum	0.005625	26.898	6.974
No. Specimens	7	7	7