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

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

Material: MTM45-1/IM7-145-32%RW Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Tensile Condition: CTD

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

ACG, Inc. Material & Process Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-IMU-LT-C-LH1-CTD-1	10.063	1.0051	0.0879	0.0055	NT		325.124	324.755	22.55	22.521	NT
AITR1392-IMU-LT-C-LH1-CTD-2	10.061	1.0053	0.0847	0.0053	NT		334.889	322.457	23.07	22.217	NT
AITR1392-IMU-LT-C-LH1-CTD-3	10.061	1.0059	0.0868	0.0054	NT		334.800	330.298	22.86	22.555	NT
AITR1392-IMU-LT-C-LH1-CTD-4	10.063	1.0059	0.0872	0.0055	NT		310.890	308.063	23.17	22.962	NT
Minimum	10.0602	1.0051	0.0847	0.0053			310.890	308.063	22.547	22.217	
Maximum	10.0634	1.0059	0.0879	0.0055			334.889	330.298	23.173	22.962	
Average	10.0617	1.0056	0.0869	0.0054			326.426	321.393	22.914	22.564	
Standard Deviation	0.0013	0.0004	0.0013	0.0001			11.326	9.476	0.277	0.306	
Coefficient of Variation (%)	0.01	0.04	1.45	1.45			3.47	2.95	1.21	1.36	
No. Specimens	5	5	5	5			4	4	4	4	

Notes:

NT=Not Tested

NR=No Result

GE=Gage Error

FM=Failure Mode Unacceptable

(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

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

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

Material: **MTM45-1/IM7-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Tensile Condition: RTD

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

ACG, Inc.
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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-IMU-LT-C-LH1-RTD-1	10.063	1.0057	0.0874	0.0055	NT		339.367	336.989	21.14	20.987	NT
AITR1392-IMU-LT-C-LH1-RTD-2	10.061	1.0054	0.0868	0.0054	NT		346.996	342.396	22.99	22.680	NT
AITR1392-IMU-LT-C-LH1-RTD-3	10.064	1.0061	0.0872	0.0054	NT		327.640	324.600	22.84	22.624	NT
AITR1392-IMU-LT-C-LH1-RTD-4	10.064	1.0060	0.0868	0.0054	NT		341.820	337.158	22.59	22.284	NT
Minimum	10.0613	1.0054	0.0868	0.0054			327.640	324.600	21.135	20.987	
Maximum	10.0638	1.0061	0.0879	0.0055			346.996	342.396	22.985	22.680	
Average	10.0630	1.0058	0.0872	0.0055			338.956	335.286	22.387	22.144	
Standard Deviation	0.0010	0.0003	0.0005	0.0000			8.186	7.553	0.850	0.791	
Coefficient of Variation (%)	0.01	0.03	0.52	0.52			2.42	2.25	3.80	3.57	
No. Specimens	5	5	5	5			4	4	4	4	

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

(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

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

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

Material: MTM45-1/IM7-145-32%RW Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: Longitudinal Compression Condition: RTD

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

ACG, Inc. Material & Process Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength (1), ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-IMU-LC-C-LH1-RTD-1	5.499	0.5060	0.0888	0.0055	NT		206.803	208.644	20.66	20.844	0.334
AITR1392-IMU-LC-C-LH1-RTD-2	5.499	0.5066	0.0903	0.0056	NT		205.032	210.313	19.49	19.987	0.375
AITR1392-IMU-LC-C-LH1-RTD-3	5.499	0.5075	0.0897	0.0056	NT		201.415	205.268	20.06	20.444	0.342
AITR1392-IMU-LC-C-LH1-RTD-4	5.499	0.5077	0.0888	0.0056	NT		195.344	197.157	18.75	18.928	0.341
AITR1392-IMU-LC-C-LH1-RTD-5	5.499	0.5059	0.0882	0.0055	NT		213.131	213.534	20.93	20.968	0.340
Minimum	5.4986	0.5059	0.0882	0.0055			195.344	197.157	18.754	18.928	0.3340
Maximum	5.4987	0.5077	0.0903	0.0056			213.131	213.534	20.928	20.968	0.3750
Average	5.4987	0.5067	0.0891	0.0056			204.345	206.983	19.977	20.234	0.3464
Standard Deviation	0.0001	0.0008	0.0008	0.0001			6.582	6.250	0.883	0.825	0.0163
Coefficient of Variation (%)	0.00	0.16	0.93	0.93			3.22	3.02	4.42	4.08	4.70
No. Specimens	5	5	5	5			5	5	5	5	5

Notes:

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

(1) Derived in accordance with AI/TR/1392 Table 3a , note (1)

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

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

Material: **MTM45-1/IM7-145-32%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%

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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-IMU-TT-C-LH1-CTD-1	10.056	1.0042	0.0881	0.0055	430.00	LWB	4.859	4.866	1.23	1.227	NT
AITR1392-IMU-TT-C-LH1-CTD-2	10.085	1.0054	0.0880	0.0055	343.00	LAB	3.878	3.877	1.30	1.302	NT
AITR1392-IMU-TT-C-LH1-CTD-3	10.057	1.0020	0.0879	0.0055	355.00	LWB	4.030	4.026	1.25	1.247	NT
AITR1392-IMU-TT-C-LH1-CTD-4	10.056	1.0015	0.0877	0.0055	393.00	LGM	4.473	4.459	1.07	1.069	NT
AITR1392-IMU-TT-C-LH1-CTD-5	10.086	1.0039	0.0883	0.0055	477.00	LGM	5.383	5.400	1.28	1.281	NT
AITR1392-IMU-TT-C-LH2-CTD-1	10.070	1.0040	0.0877	0.0055	413.00	LGM	4.691	4.675	1.26	1.259	NT
AITR1392-IMU-TT-C-LH2-CTD-2	10.083	1.0051	0.0877	0.0055	408.00	LWT	4.627	4.613	1.24	1.237	NT
AITR1392-IMU-TT-C-LH2-CTD-3	10.071	1.0042	0.0874	0.0055	405.00	LAB	4.616	4.583	1.26	1.250	NT
AITR1392-IMU-TT-C-LH2-CTD-4	10.074	1.0041	0.0878	0.0055	443.00	LAB	5.023	5.014	1.28	1.275	NT
Minimum	10.0563	1.0015	0.0874	0.0055	343.00		3.878	3.877	1.072	1.069	
Maximum	10.0861	1.0054	0.0883	0.0055	477.00		5.383	5.400	1.302	1.302	
Average	10.0712	1.0039	0.0878	0.0055	407.44		4.620	4.612	1.240	1.238	
Standard Deviation	0.0115	0.0013	0.0002	0.0000	41.47		0.465	0.469	0.067	0.068	
Coefficient of Variation (%)	0.11	0.13	0.28	0.28	10.18		10.06	10.16	5.41	5.46	
No. Specimens	10	10	10	10	9		9	9	9	9	

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

FORM MP1112 (ASTMD3039)

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

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

Material: **MTM45-1/IM7-145-32%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-IMU-TT-C-LH1-RTD-1	10.056	1.0039	0.0878	0.0055	363.00	LGM	4.118	4.109	1.15	1.149	NT
AITR1392-IMU-TT-C-LH1-RTD-2	10.086	1.0041	0.0883	0.0055	367.00	LGM	4.138	4.153	1.14	1.145	NT
AITR1392-IMU-TT-C-LH1-RTD-3	10.038	1.0035	0.0879	0.0055	FM	LIB			1.14	1.140	NT
AITR1392-IMU-TT-C-LH1-RTD-4	10.086	1.0034	0.0881	0.0055	401.00	LGM	4.535	4.541	1.16	1.157	NT
AITR1392-IMU-TT-C-LH1-RTD-5	10.086	1.0045	0.0886	0.0055	397.00	LGM	4.461	4.491	1.14	1.151	NT
AITR1392-IMU-TT-C-LH2-RTD-1	10.081	1.0049	0.0876	0.0055	348.00	LAT	3.953	3.935	1.16	1.151	NT
AITR1392-IMU-TT-C-LH2-RTD-2	10.083	1.0051	0.0876	0.0055	348.00	LGM	3.952	3.935	1.16	1.156	NT
AITR1392-IMU-TT-C-LH2-RTD-3	10.084	1.0048	0.0875	0.0055	353.00	LGM	4.017	3.992	1.14	1.134	NT
AITR1392-IMU-TT-C-LH2-RTD-4	10.084	1.0048	0.0875	0.0055	367.00	LWB	4.173	4.150	1.16	1.151	NT
AITR1392-IMU-TT-C-LH2-RTD-5	10.084	1.0051	0.0875	0.0055	318.00	LAT	3.617	3.595	1.15	1.143	NT
Minimum	10.0377	1.0034	0.0875	0.0055	318.00		3.617	3.595	1.141	1.134	
Maximum	10.0862	1.0051	0.0886	0.0055	401.00		4.535	4.541	1.161	1.157	
Average	10.0767	1.0044	0.0878	0.0055	362.44		4.107	4.100	1.150	1.148	
Standard Deviation	0.0164	0.0006	0.0004	0.0000	25.51		0.276	0.290	0.008	0.007	
Coefficient of Variation (%)	0.16	0.06	0.45	0.45	7.04		6.72	7.08	0.66	0.62	
No. Specimens	10	10	10	10	9		9	9	10	10	

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

FORM MP1112 (ASTMD3039)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	IMU	TC	LH	RTD						

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

Material: **MTM45-1/IM7-145-32%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-IMU-TC-C-LH1-RTD-1	5.498	0.5039	0.0884	0.0055	1124.00	HGB/HGT	25.246	25.346	1.27	1.273	0.011
AITR1392-IMU-TC-C-LH1-RTD-2	5.499	0.5015	0.0888	0.0055	1119.00	HGT	25.137	25.356	1.27	1.277	0.012
AITR1392-IMU-TC-C-LH1-RTD-3	5.500	0.5024	0.0891	0.0056	1157.00	BGB/HGT	25.850	26.168	1.29	1.302	0.014
AITR1392-IMU-TC-C-LH1-RTD-4	5.499	0.5042	0.0886	0.0055	1127.00	BGT	25.230	25.402	1.30	1.313	0.012
AITR1392-IMU-TC-C-LH2-RTD-1	5.502	0.5037	0.0889	0.0056	1109.00	HGB/LAB	24.758	25.021	1.15	1.161	GE
AITR1392-IMU-TC-C-LH2-RTD-2	5.503	0.5039	0.0879	0.0055	1000.00	BGM	22.586	22.551	1.25	1.248	GE
AITR1392-IMU-TC-C-LH2-RTD-3	5.502	0.5028	0.0892	0.0056	1039.00	BGM	23.169	23.481	1.14	1.151	GE
AITR1392-IMU-TC-C-LH2-RTD-4	5.501	0.5041	0.0884	0.0055	1060.00	BGT	23.781	23.893	1.24	1.248	0.011
Minimum	5.4982	0.5015	0.0879	0.0055	1000.00		22.586	22.551	1.136	1.151	0.0110
Maximum	5.5026	0.5050	0.0892	0.0056	1157.00		25.850	26.168	1.304	1.313	0.0140
Average	5.5006	0.5035	0.0886	0.0055	1091.88		24.470	24.652	1.238	1.247	0.0120
Standard Deviation	0.0017	0.0010	0.0004	0.0000	53.17		1.154	1.215	0.062	0.060	0.0012
Coefficient of Variation (%)	0.03	0.20	0.50	0.50	4.87		4.72	4.93	5.00	4.84	10.21
No. Specimens	10	10	10	10	8		8	8	8	8	5

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

FORM MP1114 (ASTMD6641)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	IMU	UNT0	LH	CTD						

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

Material: **MTM45-1/IM7-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 0/90 Unnotched Tensile Condition: CTD

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

ACG, Inc. Material & Process Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-IMU-UNT0-C-LH1-CTD-1	10.083	1.0050	0.0871	0.0054	15584.00	LWB/LAT	177.991	176.204	12.52	12.396	NT
AITR1392-IMU-UNT0-C-LH1-CTD-2	10.081	1.0049	0.0864	0.0054	15924.00	LAB/LAT	183.336	180.072	12.43	12.206	NT
AITR1392-IMU-UNT0-C-LH1-CTD-3	10.068	1.0051	0.0859	0.0054	15816.00	DGM/LAB/LAT	183.287	178.809	12.36	12.062	NT
AITR1392-IMU-UNT0-C-LH1-CTD-4	10.079	1.0044	0.0872	0.0054	14898.00	LWT/LAB	170.198	168.554	12.32	12.204	NT
AITR1392-IMU-UNT0-C-LH2-CTD-1	10.075	1.0022	0.0869	0.0054	FM	LIT			12.53	12.372	NT
AITR1392-IMU-UNT0-C-LH2-CTD-2	10.074	1.0018	0.0868	0.0054	16337.00	LWB/LAT	187.942	185.308	12.94	12.759	NT
AITR1392-IMU-UNT0-C-LH2-CTD-3	10.074	1.0024	0.0867	0.0054	15797.00	DGM/LAT/LAB	181.796	179.076	12.60	12.414	NT
AITR1392-IMU-UNT0-C-LH2-CTD-4	10.073	1.0024	0.0865	0.0054	16091.00	DGM/LAT/LAB	185.506	182.414	12.67	12.456	NT
AITR1392-IMU-UNT0-C-LH2-CTD-5	10.074	1.0019	0.0873	0.0055	16092.00	DGM/LAT/LAB	184.015	182.517	12.52	12.419	NT
Minimum	10.0677	1.0018	0.0859	0.0054	14898.00		170.198	168.554	12.323	12.062	
Maximum	10.0829	1.0051	0.0876	0.0055	16337.00		187.942	185.308	12.940	12.759	
Average	10.0759	1.0035	0.0868	0.0054	15817.38		181.759	179.119	12.544	12.365	
Standard Deviation	0.0045	0.0014	0.0005	0.0000	436.18		5.478	5.097	0.184	0.198	
Coefficient of Variation (%)	0.05	0.14	0.56	0.56	2.76		3.01	2.85	1.47	1.60	
No. Specimens	10	10	10	10	8		8	8	9	9	

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

FORM MP1112 (ASTMD3039)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition						
	AITR	1392	IMU	UNT0	LH	RTD						

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

Material: **MTM45-1/IM7-145-32%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-IMU-UNT0-C-LH1-RTD-1	10.080	1.0046	0.0870	0.0054	16316.00	LAT/LAB	186.789	184.560	11.93	11.787	NT
AITR1392-IMU-UNT0-C-LH1-RTD-2	10.067	1.0045	0.0873	0.0055	16752.00	LGB/DWB/LAT	190.988	189.505	12.46	12.364	NT
AITR1392-IMU-UNT0-C-LH1-RTD-3	10.068	1.0051	0.0873	0.0055	15824.00	DGB/LAT	180.334	178.900	12.31	12.215	NT
AITR1392-IMU-UNT0-C-LH1-RTD-4	10.069	1.0036	0.0866	0.0054	16352.00	DGB/DAB/LAT	188.139	185.145	12.11	11.912	NT
AITR1392-IMU-UNT0-C-LH2-RTD-1	10.074	1.0020	0.0865	0.0054	16226.00	LWB/LAT/DGB	187.137	184.018	12.56	12.354	NT
AITR1392-IMU-UNT0-C-LH2-RTD-2	10.074	1.0019	0.0864	0.0054	16274.00	LGM/LAT/LAB	187.999	184.581	12.42	12.193	NT
AITR1392-IMU-UNT0-C-LH2-RTD-3	10.076	1.0019	0.0869	0.0054	17371.00	LGM/DWB/LAT	199.479	197.023	12.47	12.313	NT
AITR1392-IMU-UNT0-C-LH2-RTD-4	10.075	1.0030	0.0869	0.0054	15738.00	LGM/LAB/LAT	180.638	178.312	12.32	12.160	NT
Minimum	10.0672	1.0019	0.0864	0.0054	15738.00		180.334	178.312	11.929	11.787	
Maximum	10.0795	1.0051	0.0875	0.0055	17371.00		199.479	197.023	12.563	12.364	
Average	10.0725	1.0034	0.0870	0.0054	16356.63		187.688	185.256	12.322	12.162	
Standard Deviation	0.0041	0.0012	0.0004	0.0000	517.86		6.037	5.948	0.210	0.210	
Coefficient of Variation (%)	0.04	0.12	0.45	0.45	3.17		3.22	3.21	1.71	1.72	
No. Specimens	10	10	10	10	8		8	8	8	8	

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

FORM MP1112 (ASTMD3039)

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

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

Material: **MTM45-1/IM7-145-32%RW** Normalization: Cured Ply Thickness: 0.0055 #Plies: 16

Test Type: 90/0 Compression Condition: RTD

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

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi		Modulus, Msi		Poisson's Ratio
							Measured	Normalized	Measured	Normalized	
AITR1392-IMU-UNC0-C-LH1-RTD-1	5.499	0.5034	0.0876	0.0055	4793.00	HIT/BGT	108.752	108.196	10.87	10.813	0.028
AITR1392-IMU-UNC0-C-LH1-RTD-2	5.500	0.5042	0.0878	0.0055	4774.00	HIT/BGT	107.821	107.596	10.66	10.639	0.036
AITR1392-IMU-UNC0-C-LH1-RTD-3	5.501	0.5042	0.0880	0.0055	4699.00	BGT	105.919	105.899	10.56	10.558	0.021
AITR1392-IMU-UNC0-C-LH1-RTD-4	5.501	0.5045	0.0875	0.0055	4533.00	HIB/BGB	102.726	102.104	10.23	10.164	0.017
AITR1392-IMU-UNC0-C-LH1-RTD-5	5.501	0.5043	0.0871	0.0054	4924.00	HGT	112.080	110.955	10.21	10.109	0.015
Minimum	5.4987	0.5034	0.0871	0.0054	4533.00		102.726	102.104	10.212	10.109	0.0150
Maximum	5.5014	0.5045	0.0880	0.0055	4924.00		112.080	110.955	10.869	10.813	0.0360
Average	5.5002	0.5041	0.0876	0.0055	4744.60		107.460	106.950	10.506	10.457	0.0234
Standard Deviation	0.0011	0.0004	0.0003	0.0000	143.39		3.461	3.263	0.284	0.307	0.0086
Coefficient of Variation (%)	0.02	0.08	0.38	0.38	3.02		3.22	3.05	2.71	2.94	36.84
No. Specimens	5	5	5	5	5		5	5	5	5	5

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

FORM MP1114 (ASTMD6641)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition				
	AITR	1392	IMU	IPS	LH	RTD				

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

Material: **MTM45-1/IM7-145-32%RW** Normalization: NA Cured Ply Thickness: 0.0055

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

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

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Failure Mode	Shear Strength, ksi			Modulus, Msi
						0.2% Offset	@ 5% Strain	Maximum	Measured
AITR1392-IMU-IPS-C-LH1-RTD-1	10.079	1.0031	0.0451	0.0056		5.908	8.820	NT	NT
AITR1392-IMU-IPS-C-LH1-RTD-2	10.079	1.0036	0.0447	0.0056		6.019	8.840	NT	NT
AITR1392-IMU-IPS-C-LH1-RTD-3	10.079	1.0040	0.0450	0.0056		6.268	8.760	NT	NT
AITR1392-IMU-IPS-C-LH1-RTD-4	10.079	1.0031	0.0444	0.0055		6.064	NA	NT	NT
AITR1392-IMU-IPS-C-LH1-RTD-5	10.067	1.0054	0.0452	0.0056		6.296	8.680	NT	NT
AITR1392-IMU-IPS-C-LH2-RTD-1	10.067	1.0087	0.0445	0.0056		6.470	9.590	NT	NT
AITR1392-IMU-IPS-C-LH2-RTD-2	10.067	1.0091	0.0459	0.0057		6.312	9.370	NT	NT
AITR1392-IMU-IPS-C-LH2-RTD-3	10.067	1.0089	0.0448	0.0056		6.567	9.650	NT	NT
AITR1392-IMU-IPS-C-LH2-RTD-4	10.065	1.0084	0.0446	0.0056		6.560	9.650	NT	NT
AITR1392-IMU-IPS-C-LH2-RTD-5	10.075	1.0088	0.0455	0.0057		6.560	9.650	NT	NT
Minimum	10.0646	1.0031	0.0444	0.0055		5.908	8.680		
Maximum	10.0795	1.0091	0.0459	0.0057		6.567	9.650		
Average	10.0724	1.0063	0.0450	0.0056		6.302	9.223		
Standard Deviation	0.0064	0.0027	0.0005	0.0001		0.241	0.436		
Coefficient of Variation (%)	0.06	0.27	1.06	1.06		3.83	4.73		
No. Specimens	10	10	10	10		10	9		

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition			
	AITR	1392	IMU	SBS	LH	CTD			

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

Material: **MTM45-1/IM7-145-32%RW** Normalizati Cured Ply Thickness: 0.0055

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

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

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-IMU-SBS-C-LH1-CTD-1	0.559	0.2530	0.0896	0.0056	569.00	ILS	18.832	19.168
AITR1392-IMU-SBS-C-LH1-CTD-2	0.561	0.2500	0.0882	0.0055	580.00	ILS	19.728	19.773
AITR1392-IMU-SBS-C-LH1-CTD-3	0.560	0.2525	0.0887	0.0055	554.00	ILS	18.559	18.699
AITR1392-IMU-SBS-C-LH1-CTD-4	0.561	0.2515	0.0883	0.0055	566.00	ILS	19.122	19.180
AITR1392-IMU-SBS-C-LH1-CTD-5	0.560	0.2545	0.0882	0.0055	612.00	ILS	20.441	20.495
Minimum	0.5585	0.2500	0.0882	0.0055	554.00		18.559	18.699
Maximum	0.5610	0.2545	0.0896	0.0056	612.00		20.441	20.495
Average	0.5599	0.2523	0.0886	0.0055	576.20		19.336	19.463
Standard Deviation	0.0010	0.0017	0.0006	0.0000	22.05		0.754	0.691
Coefficient of Variation (%)	0.17	0.67	0.65	0.65	3.83		3.90	3.55
No. Specimens	5	5	5	5	5		5	5

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

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

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

Material: **MTM45-1/IM7-145-32%RW** Normalizati Cured Ply Thickness: 0.0055

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

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

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-IMU-SBS-C-LH1-RTD-1	0.562	0.2525	0.0882	0.0055	413.00	ILS	13.909	13.940
AITR1392-IMU-SBS-C-LH1-RTD-2	0.562	0.2510	0.0888	0.0055	420.00	ILS	14.138	14.261
AITR1392-IMU-SBS-C-LH1-RTD-3	0.562	0.2525	0.0880	0.0055	419.00	ILS	14.137	14.143
AITR1392-IMU-SBS-C-LH1-RTD-4	0.561	0.2535	0.0875	0.0055	422.00	ILS	14.269	14.188
AITR1392-IMU-SBS-C-LH1-RTD-5	0.560	0.2520	0.0881	0.0055	394.00	ILS	13.310	13.325
Minimum	0.5600	0.2510	0.0875	0.0055	394.00		13.310	13.325
Maximum	0.5615	0.2535	0.0888	0.0055	422.00		14.269	14.261
Average	0.5611	0.2523	0.0881	0.0055	413.60		13.953	13.971
Standard Deviation	0.0007	0.0009	0.0005	0.0000	11.46		0.382	0.380
Coefficient of Variation (%)	0.12	0.36	0.51	0.51	2.77		2.74	2.72
No. Specimens	5	5	5	5	5		5	5

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

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

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

Material: **MTM45-1/IM7-145-32%RW** Normalizati Cured Ply Thickness: 0.0055

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

Test Method: MP1116 (ASTMD2344) Span (4t): 0.36

ACG, Inc.
Material & Process
Laboratory Report

Specimen ID	Length, in.	Width, in.	Thickness, in.	Cured Ply Thickness:	Ultimate Load, lb.	Failure Mode	Ultimate Strength, ksi	
							Measured	Normalized
AITR1392-IMU-SBS-C-LH1-ETD-1	0.561	0.2530	0.0877	0.0055	315.00	ILS	10.644	10.611
AITR1392-IMU-SBS-C-LH1-ETD-2	0.561	0.2500	0.0891	0.0056	317.00	ILS	10.673	10.807
AITR1392-IMU-SBS-C-LH1-ETD-3	0.559	0.2530	0.0882	0.0055	322.00	ILS	10.818	10.847
AITR1392-IMU-SBS-C-LH1-ETD-4	0.563	0.2495	0.0894	0.0056	311.00	ILS	10.453	10.624
AITR1392-IMU-SBS-C-LH1-ETD-5	0.561	0.2500	0.0895	0.0056	311.00	ILS	10.425	10.602
Minimum	0.5590	0.2495	0.0877	0.0055	311.00		10.425	10.602
Maximum	0.5625	0.2530	0.0895	0.0056	322.00		10.818	10.847
Average	0.5609	0.2511	0.0888	0.0056	315.20		10.603	10.698
Standard Deviation	0.0012	0.0017	0.0008	0.0000	4.60		0.164	0.119
Coefficient of Variation (%)	0.22	0.70	0.88	0.88	1.46		1.54	1.11
No. Specimens	5	5	5	5	5		5	5

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

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition					
	AITR	1392	IMU	OHT1	LH	RTD					

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

Material: **MTM45-1/IM7-145-32%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
AITR1392-IMU-OHT1-C-LH1-RTD-1	12.0007	1.5026	0.1315	0.0055	0.2523	5.9555	1.9186	12898.49	65.28	AGM
AITR1392-IMU-OHT1-C-LH1-RTD-2	12.0006	1.5027	0.1308	0.0055	0.2522	5.9584	1.9281	14958.76	76.11	AGM
AITR1392-IMU-OHT1-C-LH1-RTD-3	12.0006	1.5034	0.1314	0.0055	0.2521	5.9636	1.9181	13052.83	66.06	AGM
AITR1392-IMU-OHT1-C-LH1-RTD-4	12.0001	1.5003	0.1309	0.0055	0.2520	5.9536	1.9251	12969.63	66.04	AGM
AITR1392-IMU-OHT1-C-LH2-RTD-1	12.0018	1.5016	0.1333	0.0056	0.2508	5.9872	1.8819	13735.34	68.64	AGM
AITR1392-IMU-OHT1-C-LH2-RTD-2	12.0013	1.5010	0.1329	0.0055	0.2525	5.9447	1.8997	13202.53	66.17	AGM
AITR1392-IMU-OHT1-C-LH2-RTD-3	12.0019	1.5018	0.1323	0.0055	0.2510	5.9833	1.8979	13320.77	67.07	AGM
AITR1392-IMU-OHT1-C-LH2-RTD-4	12.0025	1.5025	0.1332	0.0055	0.2524	5.9527	1.8951	13347.21	66.70	AGM
Minimum	12.0001	1.4999	0.1305	0.0054	0.2508	5.9447	1.8819	12898.4860	65.2799	
Maximum	12.0025	1.5034	0.1334	0.0056	0.2525	5.9872	1.9287	14958.7620	76.1054	
Average	12.0011	1.5019	0.1320	0.0055	0.2519	5.9626	1.9081	13435.6939	67.7581	
Standard Deviation	0.0008	0.0012	0.0011	0.0000	0.0006	0.0134	0.0175	669.4695	3.5161	
Coefficient of Variation (%)	0.01	0.08	0.86	0.86	0.23	0.22	0.92	4.98	5.19	
No. Specimens	10	10	10	10	10	10	10	8	8	

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

FORM MP1117 (ASTMD5766)

Input:	Test Plan Prefix	Test Plan #	Material	Test	Cure Cycle	Condition							
	AITR	1392	IMU	OHC1	LH	RTD							

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

Material: **MTM45-1/IM7-145-32%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
AITR1392-IMU-OHC1-C-LH1-RTD-1	11.9965	1.5056	0.1347	0.0056	0.2526	0.6235	5.864	5.9603	1.8753	7140.00	35.21	LGM
AITR1392-IMU-OHC1-C-LH1-RTD-2	11.9963	1.5047	0.1339	0.0056	0.2521	0.6235	5.8675	5.9688	1.8823	7121.00	35.33	LGM
AITR1392-IMU-OHC1-C-LH1-RTD-3	11.9958	1.5049	0.1346	0.0056	0.2524	0.6255	5.866	5.9624	1.8750	7219.00	35.63	LGM
AITR1392-IMU-OHC1-C-LH1-RTD-4	11.9966	1.5046	0.1346	0.0056	0.2522	0.6251	5.8665	5.9660	1.8732	7224.00	35.66	LGM
AITR1392-IMU-OHC1-C-LH1-RTD-5	11.9964	1.5051	0.1343	0.0056	0.2518	0.6243	5.866	5.9775	1.8749	7000.00	34.63	LGM
Minimum	11.9958	1.5046	0.1339	0.0056	0.2518	0.6235	5.8640	5.9603	1.8732	7000.0000	34.6296	
Maximum	11.9966	1.5056	0.1347	0.0056	0.2526	0.6255	5.8675	5.9775	1.8823	7224.0000	35.6611	
Average	11.9963	1.5050	0.1344	0.0056	0.2522	0.6244	5.8660	5.9670	1.8761	7140.8000	35.2933	
Standard Deviation	0.0003	0.0004	0.0003	0.0000	0.0003	0.0009	0.0013	0.0067	0.0035	91.1795	0.4187	
Coefficient of Variation (%)	0.00	0.02	0.24	0.24	0.12	0.15	0.02	0.11	0.19	1.28	1.19	
No. Specimens	5	5	5	5	5	5	5	5	5	5	5	

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

FORM MP1119 (ASTMD6484)