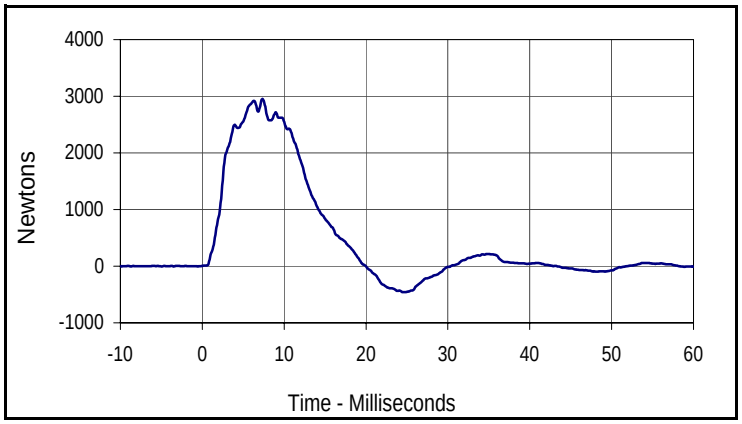
Test Program:	Thor-LX Dynamic Heel of Foot Impact Test	Test Date:	11/5/09
Serial No.:	G109	Test I.D.:	Heel01

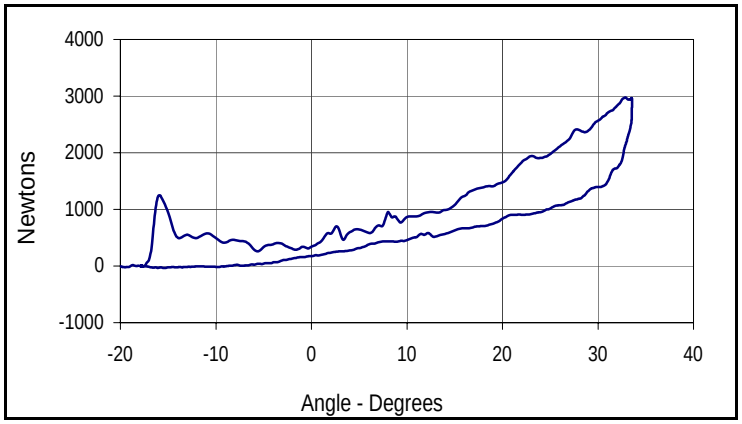
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	4.05	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	2948	Pass
		Overall Test Results		Pass



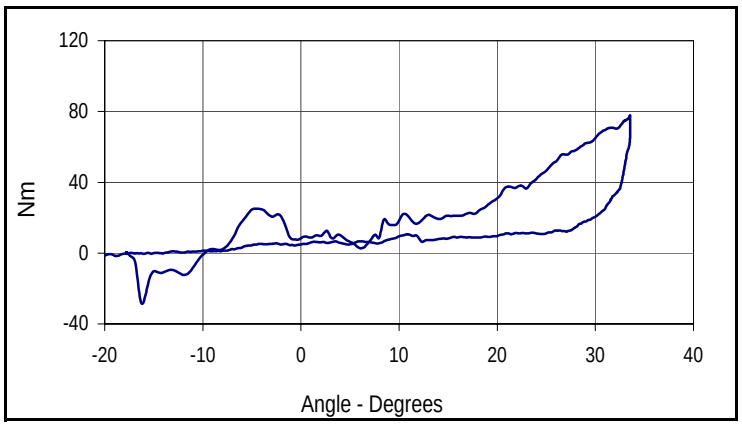
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2948.3	7.4	-459.8	24.5

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test		Test Date:	11/5/09	
Serial No.:	G109		Test I.D.:	Ball001	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	4.95	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	2976	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	33.6	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	77.9	Pass
		Overall Test Results		Pass



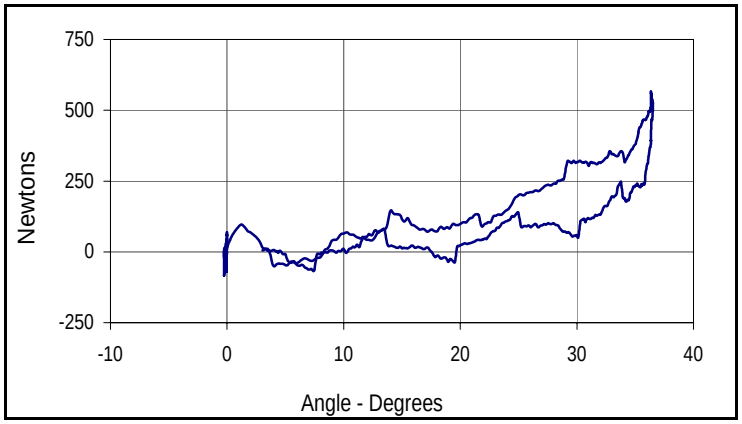
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
2975.6	32.9	-34.0	-25.4



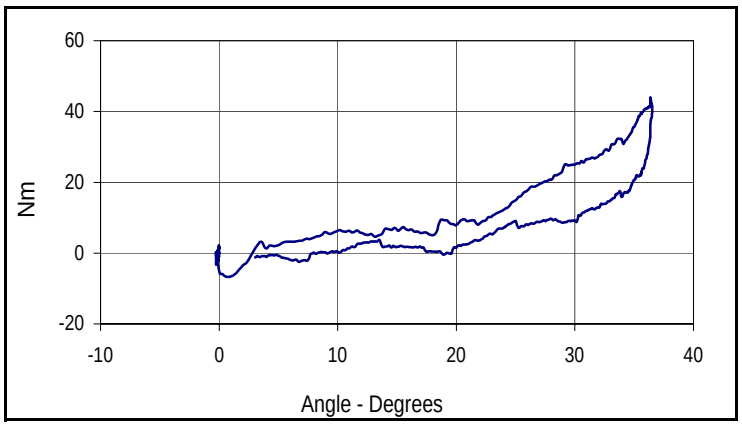
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
77.9	33.5	-28.4	-16.2

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	11/5/09
Serial No.:	G109	Test I.D.:	INV001

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.98	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	566	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.5	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	43.9	Pass
		Overall Test Results		Pass



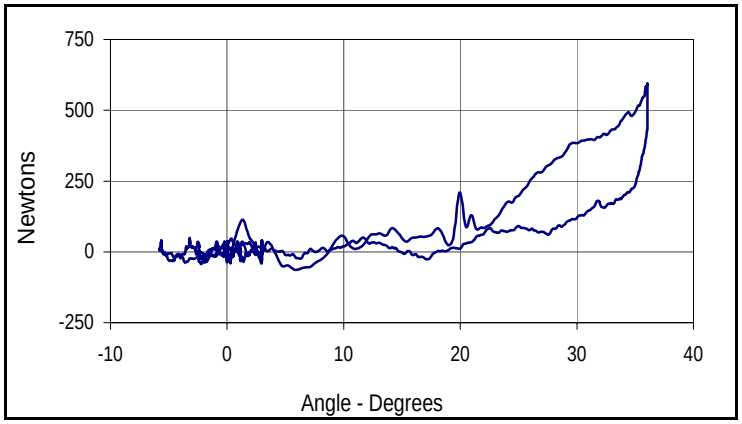
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
565.6	36.4	-83.6	-0.3



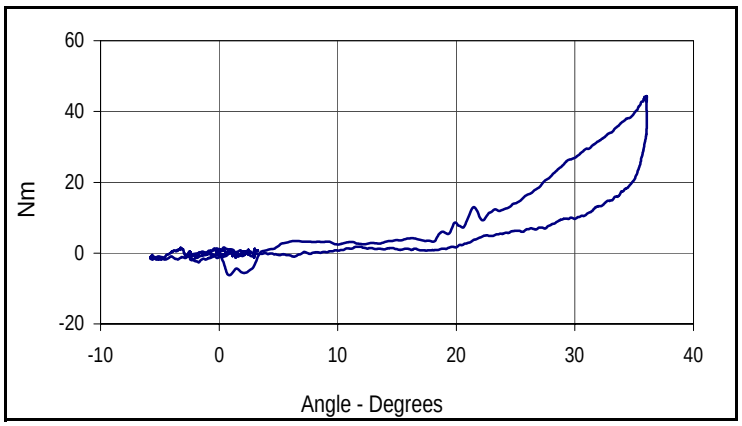
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
43.9	36.4	-6.7	0.8

Test Program:	Thor-LX Dynamic Eversion Impact Test	Test Date:	10/16/09
Serial No.:	G109	Test I.D.:	BLF1A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.98	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	594	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.1	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	44.3	Pass
		Overall Test Results		Pass



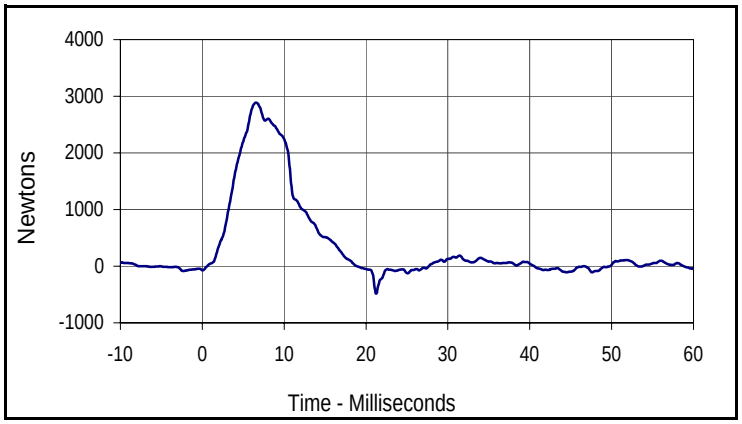
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
594.0	36.1	-64.1	5.9



Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
44.3	36.0	-6.3	0.8

Test Program:	Thor-LX Dynamic Heel of Foot Impact Test	Test Date:	11/5/09
Serial No.:	0039	Test I.D.:	Heel02

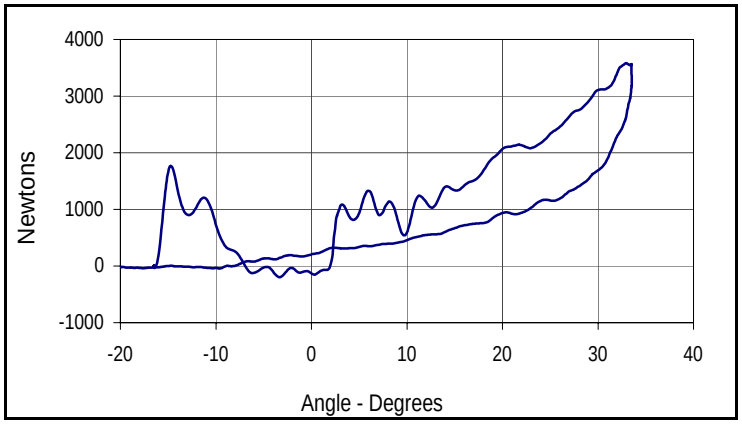
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	4.05	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	2888	Pass
		Overall Test Results		Pass



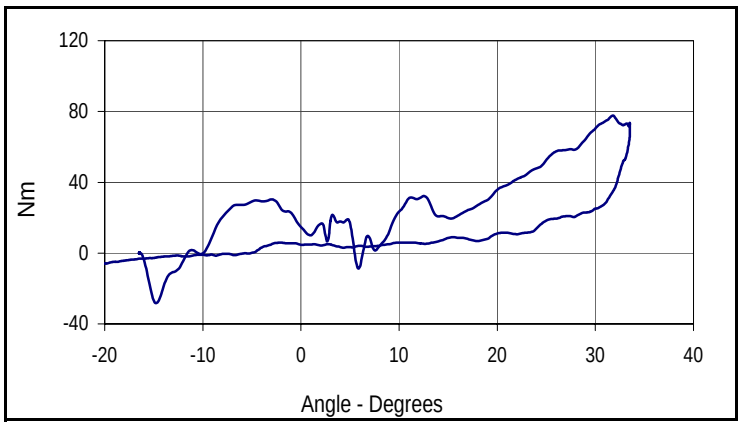
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2888.1	6.6	-481.9	21.2

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test		Test Date:	11/5/09	
Serial No.:	0039		Test I.D.:	Ball002	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	5.04	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	3583	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	33.5	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	77.7	Pass
		Overall Test Results		Pass



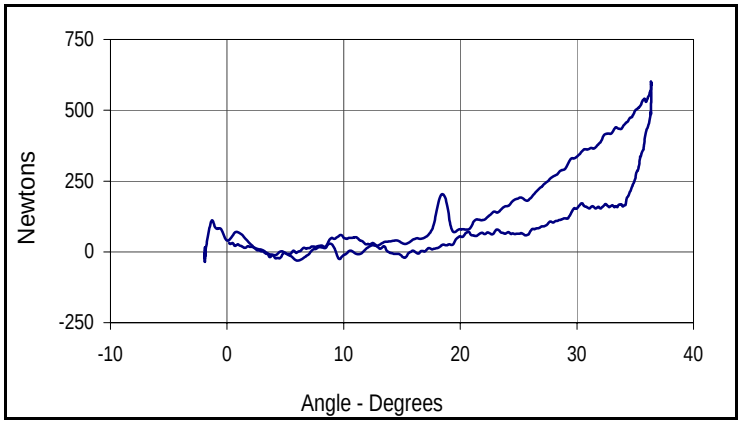
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
3583.3	32.9	-195.1	-3.3



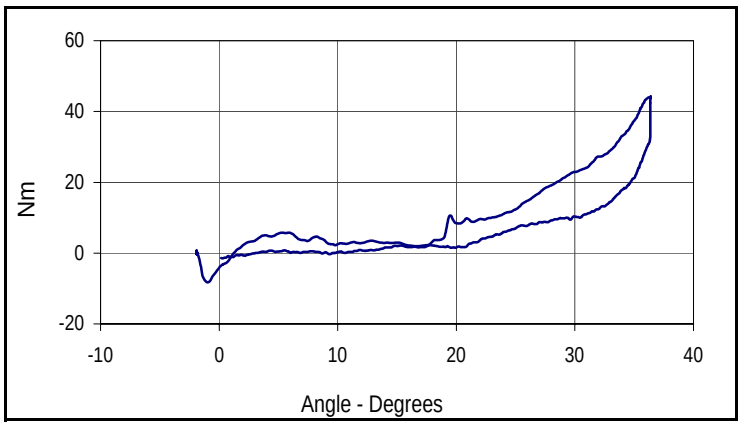
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
77.7	31.8	-28.2	-14.8

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	11/5/09
Serial No.:	0039	Test I.D.:	INV001

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.94	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	601	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.4	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	44.2	Pass
		Overall Test Results		Pass



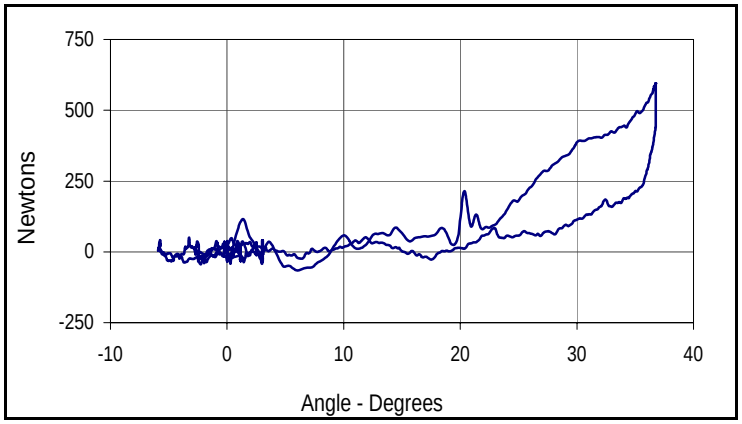
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
600.7	36.4	-35.3	-1.9



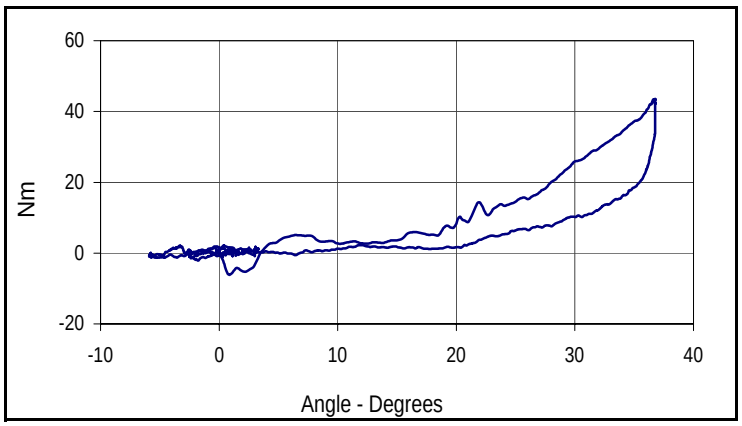
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
44.2	36.4	-8.3	-0.9

Test Program:	Thor-LX Dynamic Eversion Impact Test	Test Date:	10/16/09
Serial No.:	0039	Test I.D.:	EV002

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.98	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	596	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.8	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	43.5	Pass
		Overall Test Results		Pass



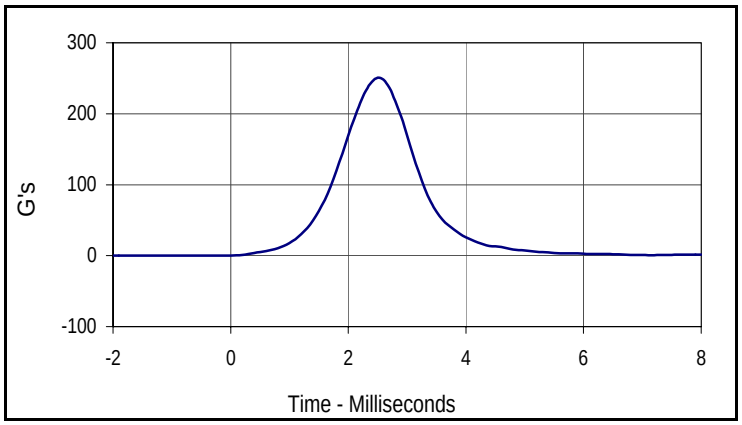
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
595.6	36.8	-65.5	6.1



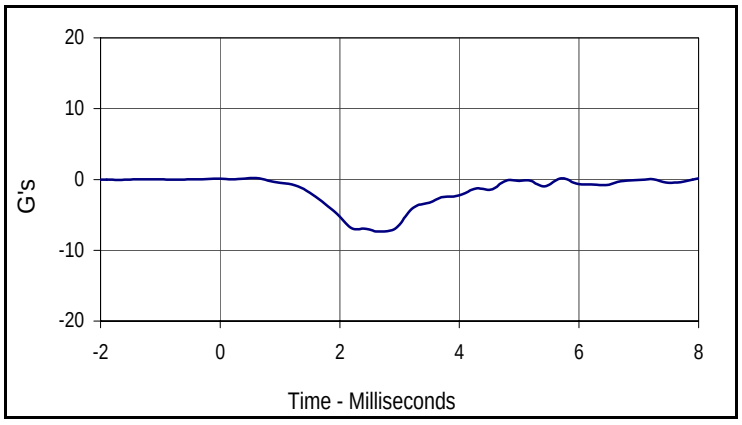
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
43.5	36.8	-6.1	0.9

Test Program:	Hybrid III 5th Percentile Female Head Drop Test	Test Date:	11/10/09
ATD Serial No.:	630	Test I.D.:	HD001

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	250.0 to 300.0	250.9	Pass
Peak Lateral Acceleration	G's	≤15.0	7.4	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
		Overall Test Results		Pass



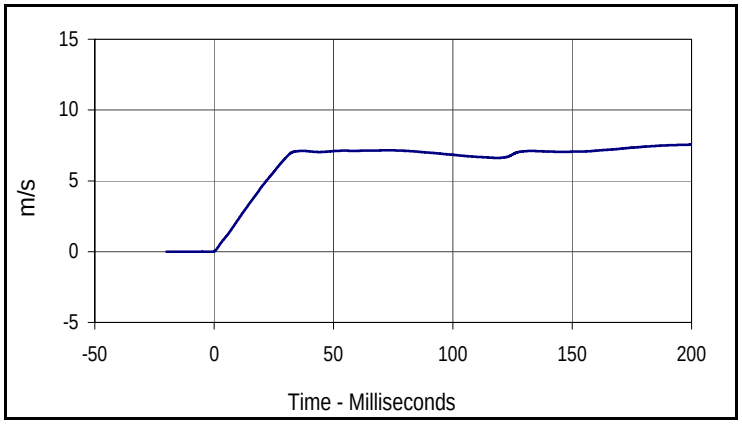
Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
250.9	2.5	0.0	-2.0



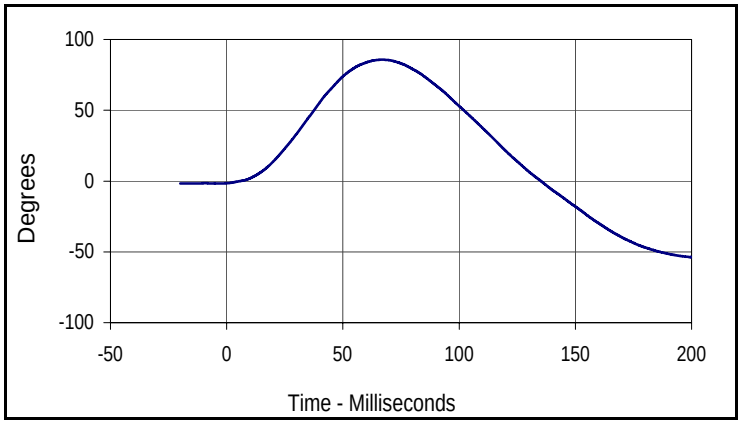
Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.2	0.5	-7.4	2.7

Test Program:	Hybrid III 5th Percentile Female Neck Flexion Test	Test Date:	11/10/09
ATD Serial No.:	630	Test I.D.:	NF12B

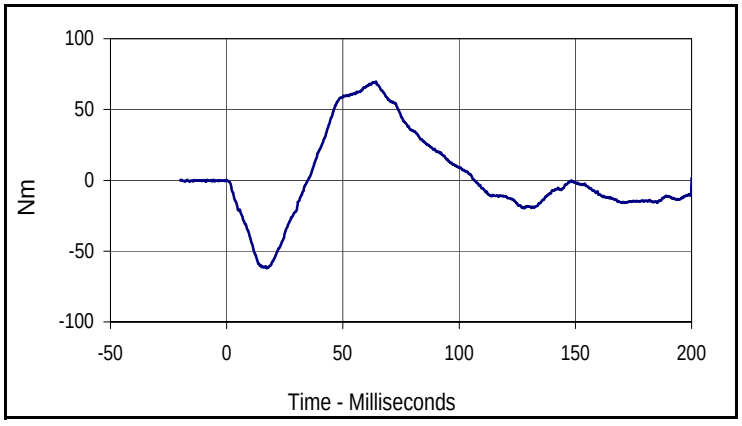
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.06	Pass
Pendulum Deceleration	10 Msec.	m/s	2.1 to 2.5	2.3	Pass
	20 Msec.	m/s	4.0 to 5.0	4.6	Pass
	30 Msec.	m/s	5.8 to 7.0	6.6	Pass
"D" Plane Rotation	Max	Degrees	77.0 to 91.0	85.7	Pass
Peak Moment in Rotation	Max	Nm	69.0 to 83.0	69.8	Pass
Positive Moment Decay, Time To 10 Nm		Msec.	80.0 to 100.0	99.8	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
7.6	200.0	0.0	-0.7



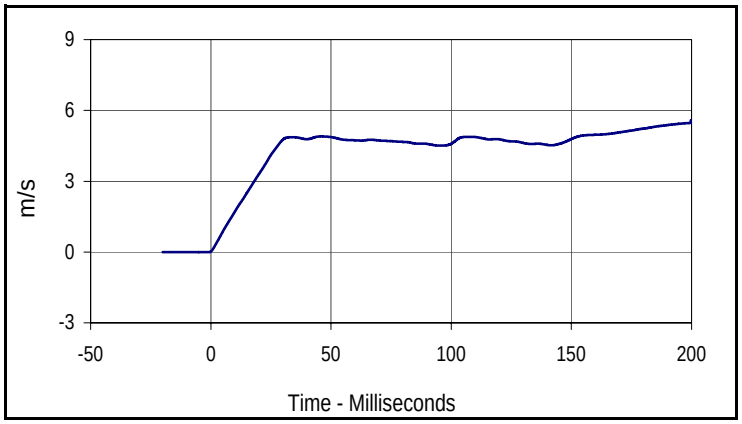
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
85.7	66.9	-53.7	200.0



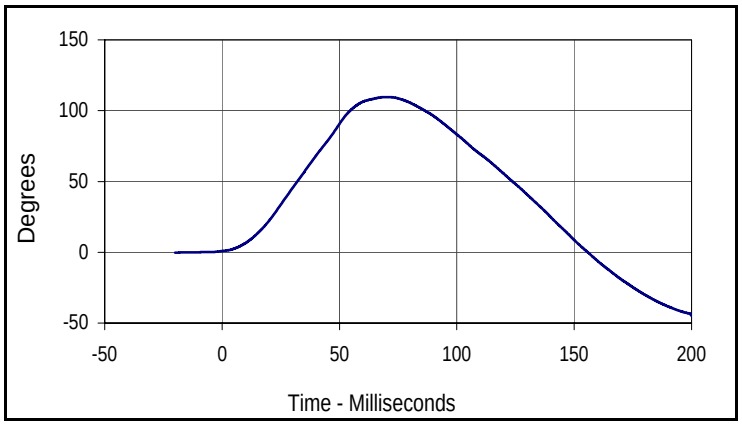
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
69.8	64.2	-62.1	17.2

Test Program:	Hybrid III 5th Percentile Female Neck Extension Test	Test Date:	11/10/09
ATD Serial No.:	630	Test I.D.:	NE12C

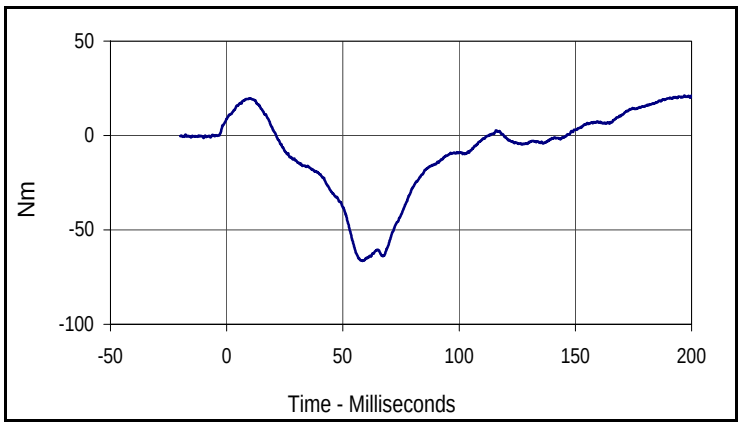
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.95 to 6.19	5.98	Pass
Pendulum Deceleration	10 Msec.	m/s	1.5 to 1.9	1.7	Pass
	20 Msec.	m/s	3.1 to 3.9	3.3	Pass
	30 Msec.	m/s	4.6 to 5.6	4.8	Pass
"D" Plane Rotation	Max	Degrees	99.0 to 114.0	109.6	Pass
Peak Moment in Rotation	Max	Nm	-53.0 to -65.0	64.9	Pass
Positive Moment Decay, Time To -10 Nm		Msec.	94.0 to 114.0	95.6	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
5.6	200.0	0.0	-0.9



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
109.6	69.9	-44.5	200.0



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
21.1	197.0	-64.9	58.4

Test Program:	Hybrid III 5th Percentile Female Knee Impact Test	Test Date:	11/11/09
ATD Serial No.:	630	Test I.D.:	LK12A , RK12A

Left Knee

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	3450 to 4060	3765	Pass
		Overall Test Results		Pass

Right Knee

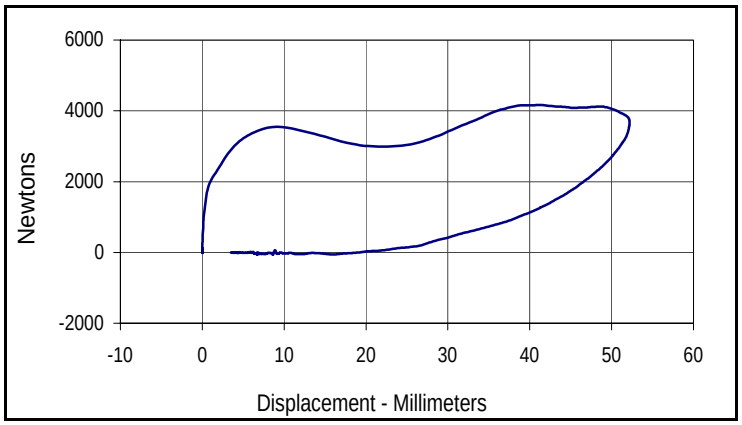
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	3450 to 4060	3862	Pass
		Overall Test Results		Pass

Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
3765.4	2.1	-33.4	7.0

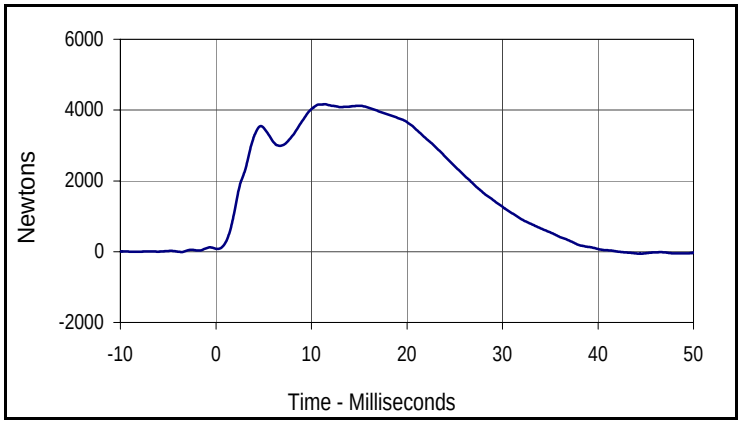
Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
3862.2	2.1	-34.3	8.7

Test Program:	Hybrid III 5th Percentile Female Thorax Impact Test	Test Date:	11/12/09
ATD Serial No.:	630	Test I.D.:	CH001

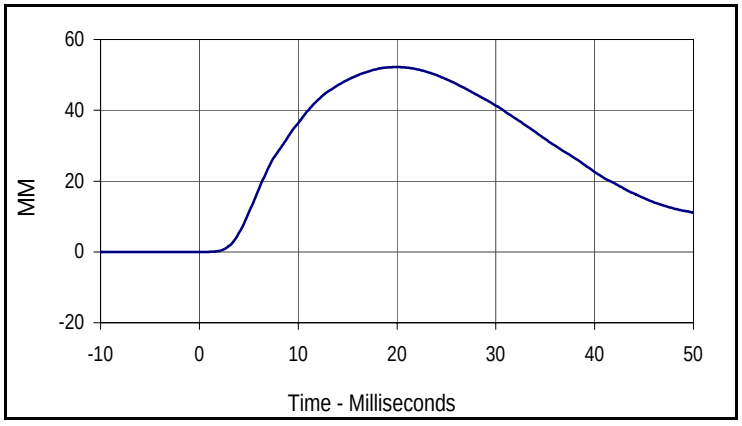
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.59 to 6.83	6.63	Pass
Peak Chest Deflection	MM	50.0 to 58.0	52.2	Pass
Peak Force Between 50 and 58 MM	Newtons	3900 to 4400	4162	Pass
Peak Force Between 18 and 50 MM	Newtons	≤4600	4058	Pass
Internal Hysterysis	%	69 to 85	81.4	Pass
		Overall Test Results		Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysterysis
003	FIL	180	81.4
Peak Probe Force		Peak Chest Displ.	
4161.9		52.2	



Curve Description			
Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
4161.9	11.4	-67.1	86.8



Curve Description			
Chest Deflection			
CURNO	Type	SAE Class	Units
001	FIL	180	MM
Max	Time	Min	Time
52.2	19.9	0.0	-9.0

Test Program:	Hybrid III 5th Percentile Female Torso Flexion Test	Test Date:	11/11/09
ATD Serial No.:	630	Test I.D.:	TF001

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Initial reference plane angle	Degrees	≤20.0	5.2	Pass
Peak Force at 45 +/-0.5 degrees	Newtons	320.0 to 390.0	365.2	Pass
Torso rotation rate	deg/sec	0.5 to 1.5	1.2	Pass
Final reference plane angle	Degrees	+/-8	3.5	Pass
		Overall Test Results		Pass

Test Program:	Hybrid III 5th Percentile Female External Measurements	Test Date:	11/12/09
ATD Serial No.:	630	Test I.D.:	N/A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory relative humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	774.7 to 800.1	779	Pass
B - Shoulder pivot height	mm	431.8 to 457.2	445	Pass
C - "H" point height (Reference)	mm	81.3 to 86.3	84	Pass
D - "H" point from seat back (Ref.)	mm	144.8 to 149.8	145	Pass
E - Shoulder pivot from backline	mm	68.6 to 83.8	81	Pass
F - Thigh clearance	mm	119.4 to 134.6	131	Pass
G - Back of elbow to wrist pivot	mm	243.9 to 259.1	255	Pass
H - Head to back line	mm	40.7 to 45.7	44	Pass
I - Shoulder to elbow length	mm	276.8 to 297.2	290	Pass
J - Elbow rest heignt	mm	182.8 to 203.2	200	Pass
K - Buttock to knee length	mm	520.7 to 546.1	544	Pass
L - Poplipteal height	mm	355.6 to 376.0	365	Pass
M - Knee pivot height	mm	393.7 to 419.1	415	Pass
N - Buttock poplipteal length	mm	414.0 to 439.4	420	Pass
O - Chest depth without jacket	mm	175.3 to 190.5	185	Pass
P - Foot length	mm	218.5 to 233.7	230	Pass
R - Buttock to knee pivot length	mm	457.2 to 482.6	475	Pass
S - Head breadth	mm	137.1 to 147.3	145	Pass
T - Head depth	mm	177.8 to 188.0	180	Pass
U - Hip breadth	mm	299.7 to 314.9	312	Pass
V - Shoulder breadth	mm	350.5 to 365.7	365	Pass
W - Foot breadth	mm	78.8 to 94.0	90	Pass
X - Head circumference	mm	528.3 to 548.7	540	Pass
Y - Chest circumference with jacket	mm	850.8 to 881.3	880	Pass
Z - Waist circumference	mm	759.5 to 789.9	775	Pass
AA - Location for chest circumference	mm	299.7 to 309.9	305	Pass
BB - Location for waist circumference	mm	160.1 to 170.2	165	Pass
		Overall Test Results		Pass