

VERTICAL JUMP MOBILITY & ALIGNMENT

VARIABLE	LOADING			LANDING		
	LEFT	RIGHT	DELTA	LEFT	RIGHT	DELTA
HIP FLEX	37.5°	36.7°	0.8°	30.7°	28.2°	2.5°
KNE FLEX	86.3°	87.2°	0.9°	67.1°	65.9°	1.2°
DYN VAL	9.4°	4.4°	5°	1.5°	-1.6°	3.1°
ANK FLEX	30.9°	35.7°	4.8°	27.8°	28.2°	0.4°
TOTAL	154.8°	159.6°	4.8°	125.6°	122.3°	3.3°

PERFORMANCE & KINETICS

BIOMETRICS	LEFT	RIGHT	DELTA
JUMP HEIGHT	39.4 CM		
GRF TAKEOFF	626 N	807 N	181 N
NET IMPULSE	162 NS		
HIP TOR	4.6%	7.1%	2.5%
KNEE TOR	5.6%	10.1%	4.5%
ANKLE TOR	1.3%	0.8%	0.5%

STIFFNESS

BIOMETRICS	LEFT	RIGHT	DELTA
DEPTH	12.4 CM		
GRF LANDING	670 N	1057 N	387 N
GRF RATIO	0.9	1.4	---

LANDING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

BILATERAL

UNILATERAL JUMP MOBILITY & ALIGNMENT

VARIABLE	LOADING			LANDING		
	LEFT	RIGHT	DELTA	LEFT	RIGHT	DELTA
HIP FLEX	12.9°	20.6°	7.7°	18.4°	27.5°	9.1°
KNE FLEX	46.3°	57.9°	11.6°	37.1°	58.4°	21.3°
DYN VAL	9.7°	18°	8.3°	9.2°	15.3°	6.1°
ANK FLEX	26.4°	30.3°	3.9°	15.3°	26.7°	11.4°
TOTAL	85.5°	108.8°	23.3°	70.9°	112.6°	41.7°

PERFORMANCE & KINETICS

BIOMETRICS	LEFT	RIGHT	DELTA
JUMP HEIGHT	19.4 CM	27.6 CM	8.2 CM
GRF TAKEOFF	1291 N	1463 N	172 N
NET IMPULSE	88 NS	127 NS	39 NS
HIP TOR	6%	6.1%	0.1%
KNEE TOR	9.3%	14.8%	5.5%
ANKLE TOR	1.4%	2.5%	1.1%

STIFFNESS

BIOMETRICS	LEFT	RIGHT	DELTA
DEPTH	-1 CM	5.4 CM	6.4 CM
GRF LANDING	1556 N	1641 N	85 N
GRF RATIO	2	2.1	0.1

LANDING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

LEFT RIGHT

ASYMMETRY

- High- L Hip Flex Load 46%
- High- L Knee Flex Load 22%
- High- L Total Flex Load 24%
- High- L Hip Flex Land 39%
- High- L Knee Flex Land 45%
- High- L Ankle Flex Land 54%
- High- L Total Flex Land 45%
- High- L Jump Height 35%

DROP JUMP MOBILITY & ALIGNMENT

VARIABLE	LANDING 1		
	LEFT	RIGHT	DELTA
HIP FLEX	26.2°	19.7°	6.5°
KNE FLEX	86.9°	83.1°	3.8°
DYN VAL	1.7°	3.1°	1.4°
ANK FLEX	35.8°	38.8°	3°
TOTAL	148.9°	141.6°	7.3°

PERFORMANCE & KINETICS

BIOMETRICS	LEFT	RIGHT	DELTA
JUMP HEIGHT	38.4 CM		
GRF TAKEOFF	625 N	1116 N	492 N
NET IMPULSE	194 NS		
HIP TOR	4.5%	6.1%	1.6%
KNEE TOR	8.9%	21.8%	12.9%
ANKLE TOR	1.5%	1%	0.5%

STIFFNESS

BIOMETRICS	LANDING 1		
	LEFT	RIGHT	DELTA
DEPTH	20.7 CM		
GRF LANDING	731 N	1336 N	604 N
GRF RATIO	0.9	1.7	0.8

LANDING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

BILATERAL

ASYMMETRY

- High- R Hip Flex 28%

CONCENTRIC JUMP MOBILITY & ALIGNMENT

VARIABLE	LOADING			LANDING		
	LEFT	RIGHT	DELTA	LEFT	RIGHT	DELTA
HIP FLEX	45.4°	47.8°	2.4°	32.3°	30.2°	2.1°
KNE FLEX	77.4°	73.4°	4°	70.1°	68.1°	2°
DYN VAL	6.7°	6.6°	0.1°	6.1°	0.9°	5.2°
ANK FLEX	28.1°	23.2°	4.9°	28.7°	28.2°	0.5°
TOTAL	150.9°	144.4°	6.5°	131.1°	126.5°	4.6°

PERFORMANCE & KINETICS

BIOMETRICS	LEFT	RIGHT	DELTA
JUMP HEIGHT	33 CM		
GRF TAKEOFF	794 N	772 N	22 N
NET IMPULSE	145 NS		
HIP TOR	12.1%	11.3%	0.8%
KNEE TOR	10.1%	8.9%	1.2%
ANKLE TOR	0.8%	0.9%	0.1%

STIFFNESS

BIOMETRICS	LEFT	RIGHT	DELTA
DEPTH	13.6 CM		
GRF LANDING	761 N	889 N	128 N
GRF RATIO	1	1.1	0.1

LANDING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

BILATERAL

LATERAL BOUND MOBILITY & ALIGNMENT

VARIABLE	LANDING 1		
	LEFT	RIGHT	DELTA
LAT TRUNK FLEX	10.4°	-0.4°	10.8°
HIP FLEX	26.1°	32.1°	6°
KNE FLEX	55.6°	66.6°	11°
DYN VAL	3.2°	10.1°	6.9°
ANK FLEX	25.5°	14°	11.5°
TOTAL	107.2°	112.7°	5.5°

PERFORMANCE & KINETICS

BIOMETRICS	JUMP 2		
	LEFT	RIGHT	DELTA
JUMP DISTANCE	135.8 CM	130.8 CM	5 CM
GRF TAKEOFF	1202 N	1340 N	138 N
HIP TOR	7.1%	9%	1.9%
KNEE TOR	2.8%	2.4%	0.4%
ANKLE TOR	0.9%	1.3%	0.4%

STIFFNESS

BIOMETRICS	LANDING 1		
	LEFT	RIGHT	DELTA
DEPTH	9.2 CM	13.8 CM	4.6 CM
GRF LANDING	1372 N	1402 N	30 N
GRF RATIO	1.8	1.8	---

LANDING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

LEFT RIGHT

ASYMMETRY

- High- L Hip Flex 21%
- High- L Knee Flex 18%
- High- R Ankle Flex 59%

MULTI HOP MOBILITY & ALIGNMENT

VARIABLE	LOADING		
	LEFT	RIGHT	DELTA
HIP FLEX	10.9°	2.1°	8.8°
KNE FLEX	34.6°	29.8°	4.8°
DYN VAL	14.1°	25°	10.9°
ANK FLEX	19.7°	13.8°	5.9°
TOTAL	65.2°	45.7°	19.5°

PERFORMANCE & KINETICS

BIOMETRICS	LEFT	RIGHT	DELTA
JUMP HEIGHT	21.2 CM	22.5 CM	1.3 CM
GRF TAKEOFF	1976 N	2054 N	78 N
NET IMPULSE	-70 NS	29 NS	100 NS
FLIGHT:CONTACT	1.5	1.6	0.1
HIP TOR	11.8%	7.4%	4.4%
KNEE TOR	22.2%	21%	1.2%
ANKLE TOR	3%	3.2%	0.2%

STIFFNESS

BIOMETRICS	LEFT	RIGHT	DELTA
DEPTH	0.4 CM	-1.1 CM	1.5 CM
GRF LANDING	1885 N	1831 N	54 N
GRF RATIO	2.4	2.4	---

PAIN

LEFT RIGHT

ASYMMETRY

- High- R Hip Flex Load 135%
- High- R Knee Flex Load 15%
- High- R Ankle Flex Load 35%
- High- R Total Flex Load 35%

SHOULDER ABDUCTION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
SHOULDER ABDUCTION MAX	195.4°	195.5°	0.1°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
ANTERIOR CORONAL DEVIATION MAX	3.6°	7.7°	4.1°
ELBOW FLEXION DURING ABDUCTION	12.6°	8.3°	4.3°

PAIN

BILATERAL

SHOULDER HORIZONTAL ABDUCTION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
SHOULDER HORIZONTAL ABDUCTION MAX	66.1°	53.4°	12.7°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
INFERIOR TRANSVERSE DEVIATION MAX	75.4°	77.2°	1.8°
ELBOW FLEXION	39.5°	23°	16.5°

PAIN

BILATERAL

ASYMMETRY

•High- R Horiz Abd Max 21%

SHOULDER INTERNAL/EXTERNAL ROTATION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
SHOULDER EXTERNAL ROTATION MAX	90.8°	91.7°	0.9°
SHOULDER INTERNAL ROTATION MAX	90.2°	96.8°	6.6°

ALIGNMENT

DURING EXTERNAL ROTATION	LEFT	RIGHT	DELTA
SUPERIOR TRANSVERSE DEVIATION MAX	1.9°	6.5°	4.6°
INFERIOR TRANSVERSE DEVIATION MAX	9.6°	6.2°	3.4°
ANTERIOR CORONAL DEVIATION MAX	3.5°	3.9°	0.4°
DURING INTERNAL ROTATION	LEFT	RIGHT	DELTA
SUPERIOR TRANSVERSE DEVIATION MAX	2.1°	6°	3.9°
INFERIOR TRANSVERSE DEVIATION MAX	2.7°	5.2°	2.5°
ANTERIOR CORONAL DEVIATION MAX	---	0°	---

PAIN

BILATERAL

SHOULDER FLEXION/EXTENSION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
SHOULDER FLEXION MAX	198.3°	194.5°	3.8°
SHOULDER EXTENSION MAX	64.3°	71.3°	7°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
ELBOW FLEXION MAX DURING FLEXION	28.6°	16.5°	12.1°
ELBOW FLEXION MAX DURING EXTENSION	16.2°	12.7°	3.5°
SAGITTAL PLANE LATERAL DEVIATION MAX	28.8°	19.5°	9.3°

PAIN

BILATERAL

ASYMMETRY

•Mod- L Extension Max 10%

FORWARD FOLD

MOBILITY

VARIABLE	VALUE
THORACIC FLEXION MAX	34.9°
LUMBAR FLEXION MAX	58.1°

ALIGNMENT

BIOMETRICS	VALUE
TOTAL THORACIC LATERAL FLEXION	6°

PAIN

BILATERAL

TRUNK ROTATION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
THORACIC ROTATION MAX	40.6°	41.3°	0.7°
LUMBAR ROTATION MAX	17.3°	18.2°	0.9°

PAIN

BILATERAL

TRUNK LATERAL FLEXION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
THORACIC LATERAL FLEXION MAX	24.4°	22.9°	1.5°
LUMBAR LATERAL FLEXION MAX	12°	11.1°	0.9°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
THORACIC FLEXION MAX	4.2°	2.2°	2°
LUMBAR FLEXION MAX	2.8°	---	---

PAIN

LEFT	RIGHT
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REVERSE LUNGE WITH ROTATION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
THORACIC ROTATION MAX	37.5°	18°	19.5°
LUMBAR ROTATION MAX	16.8°	12°	4.8°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
THORACIC FLEXION MAX	11.8°	15.5°	3.7°
LUMBAR FLEXION MAX	17.8°	20.9°	3.1°

PAIN

LEFT	RIGHT
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STANDING HIP ABDUCTION

MOBILITY

VARIABLE	LEFT	RIGHT	DELTA
HIP ABDUCTION MAX	53.9°	54.7°	0.8°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
HIP INTERNAL ROTATION MAX	---	1.1°	---
HIP EXTERNAL ROTATION MAX	31.1°	27.4°	3.7°

PAIN

LEFT	RIGHT
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BILATERAL SQUAT

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
DEPTH	61.6 CM				
HIP	91.4°	33.5%	88.1°	33.7%	3.3°
KNEE	142.4°	52.2%	138.8°	53.1%	3.6°
ANKLE	39.1°	14.3%	34.2°	13.1%	4.9°
TOTAL	272.8°	---	261.2°	---	11.6°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
TRUNK FLEX	47.1°		
MAX WEIGHT SHIFT	54.9%	45.1%	9.8%
HIP ABDUCTION	-3.6°	-4.5°	0.9°
FEM ROT	5.6°	5.5°	0.1°
DYN VALGUS	6.1°	6.3°	0.2°
TIB ROT	5.9°	7.1°	1.2°

LOADING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

BILATERAL

BIOMETRICS	LEFT	RIGHT
TRUNK FLEX	45.8°	
SHIN FLEX	39.8°	35.4°

OVERHEAD SQUAT

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
DEPTH	55.2 CM				
HIP	114.7°	39.5%	105.8°	37.5%	8.9°
KNEE	137.7°	47.3%	134.7°	47.8%	3°
ANKLE	38.4°	13.2%	41.5°	14.7%	3.1°
TOTAL	290.9°	---	282°	---	8.9°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
TRUNK FLEX	30.3°		
MAX WEIGHT SHIFT	54.7%	45.3%	9.4%
HIP ABDUCTION	-4.7°	-3.7°	1°
FEM ROT	2.4°	-0.1°	2.5°
DYN VALGUS	6.5°	6.5°	---
TIB ROT	2.4°	---	---

LOADING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

BILATERAL

BIOMETRICS	LEFT	RIGHT
TRUNK FLEX	29.6°	
SHIN FLEX	44.2°	45.5°

UNILATERAL SQUAT

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
DEPTH	18.9 CM	---	28.8 CM	---	9.9 CM
HIP	62.5°	35.8%	76.4°	35.8%	13.9°
KNEE	82.1°	47.1%	100°	46.8%	17.9°
ANKLE	29.7°	17.1%	37°	17.3%	7.3°
TOTAL	174.3°	---	213.5°	---	39.2°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
LAT TRUNK FLEX	5.3°	7.4°	2.1°
PELVIC OBLIQUITY	6.9°	7°	0.1°
HIP ABDUCTION	8.9°	12.3°	3.4°
FEM ROT	12.2°	12.2°	---
DYN VALGUS	11.8°	23.6°	11.8°
TIB ROT	14.6°	12.9°	1.7°

LOADING STRATEGY

LEFT LEG	HIP	KNEE
RIGHT LEG	HIP	KNEE

PAIN

LEFT	RIGHT
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ASYMMETRY

- High- L COM Depth 41%
- High- L Hip Flex 20%
- High- L Knee Flex 20%
- High- L Ankle Flex 22%
- High- L Total Flex 20%

BIOMETRICS	LEFT	RIGHT
TRUNK FLEX	54.9°	58.3°
SHIN FLEX	29.3°	33.8°

FRONT LUNGE

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
STRIDE	79.5 CM	---	79.5 CM	---	---
TRAIL HIP EXT	20.4°	---	21.1°	---	0.7°
HIP	69.5°	37.5%	71.7°	35.7%	2.2°
KNEE	95.2°	51.3%	102.2°	50.9%	7°
ANKLE	20.7°	11.1%	26.9°	13.4%	6.2°
TOTAL	185.3°	---	200.8°	---	15.5°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
LAT TRUNK FLEX	-5.2°	-3.5°	1.7°
PELVIC OBLIQUITY	-11.5°	-8.4°	3.1°
HIP ADDUCTION	9.1°	12.6°	3.5°
FEM ROT	18.7°	18.7°	---
DYN VALGUS	7.6°	17.1°	9.5°
TIB ROT	18°	20.3°	2.3°

PAIN

LEFT	RIGHT
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ASYMMETRY

- High- L Ankle Flex 26%

LATERAL LUNGE

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
STRIDE	108.3 CM	---	105.8 CM	---	2.5 CM
TRAIL HIP ABD	38.6°	---	49.6°	---	11°
HIP	76.4°	41%	74°	35.8%	2.4°
KNEE	86.2°	46.3%	97.6°	47.1%	11.4°
ANKLE	23.7°	12.7%	35.3°	17.1%	11.6°
TOTAL	186.4°	---	207°	---	20.6°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
TRUNK FLEX	49°	50.5°	1.5°
PELVIC OBLIQUITY	-8.3°	-5°	3.3°
HIP ADDUCTION	-19.2°	-11.5°	7.7°
FEM ROT	-6.1°	-4.5°	1.6°
DYN VALGUS	6.7°	8.1°	1.4°
TIB ROT	-6.5°	-1.8°	4.7°

LOADING STRATEGY

LEFT LEG	RIGHT LEG	HIP	KNEE	LEFT	RIGHT

PAIN

LEFT	RIGHT
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ASYMMETRY

- High- L Trail Hip Abd 25%
- Mod- L Knee Flex 12%
- High- L Ankle Flex 39%
- Mod- L Total Flex 10%

STORK STANCE

SWAY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
COM	10.6 CM	---	15.6 CM	---	5 CM
HIP	15.3 CM	36.4%	13.8 CM	56.2%	1.5 CM
KNEE	25.7 CM	61%	10.1 CM	41.1%	15.6 CM
ANKLE	1.1 CM	2.6%	0.7 CM	2.7%	0.4 CM
TOTAL	42.2 CM	---	24.6 CM	---	17.6 CM

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
LAT TRUNK FLEX	9.3°	4.6°	4.7°
PELVIC OBLIQUITY	16.6°	18.7°	2.1°
HIP ADDUCTION	8.4°	-6.2°	14.6°
FEM LAT TILT	11.2°	9.8°	1.4°
DYN VALGUS	11.5°	8.1°	3.4°
TIB LAT TILT	-6.3°	-5.3°	1°

PAIN

LEFT	RIGHT
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SINGLE LEG BALANCE

SWAY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
COM	309.8 CM	---	102.7 CM	---	207.1 CM
HIP	196.4 CM	37.9%	66.1 CM	67.3%	130.3 CM
KNEE	306.2 CM	59%	25.1 CM	25.6%	281.1 CM
ANKLE	16.2 CM	3.1%	7 CM	7.1%	9.2 CM
TOTAL	518.8 CM	---	98.1 CM	---	420.7 CM

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
TRUNK FLEX	7.1°	3.7°	3.4°

PAIN

LEFT	RIGHT
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TANDEM BALANCE

SWAY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
COM	873.3 CM				
HIP	830.6 CM	37.7%	959.2 CM	38.4%	128.6 CM
KNEE	768 CM	34.9%	1119.8 CM	44.9%	351.8 CM
ANKLE	604.1 CM	27.4%	416.6 CM	16.7%	187.5 CM
TOTAL	2202.7 CM	---	2495.5 CM	---	292.8 CM

PAIN

BILATERAL

STEP DOWN

MOBILITY

BIOMETRICS	LEFT	% TOTAL	RIGHT	% TOTAL	DELTA
RATE	12.5 CM/S	---	10.8 CM/S	---	1.7 CM/S
HIP	---	---	14.6°	9%	---
KNEE	54.7°	62.4%	102.2°	63.4%	47.5°
ANKLE	35.7°	40.8%	44.4°	27.6%	8.7°
TOTAL	87.7°	---	161.2°	---	73.5°

ALIGNMENT

BIOMETRICS	LEFT	RIGHT	DELTA
LAT TRUNK FLEX	2.3°	3.7°	1.4°
PELVIC OBLIQUITY	-16.1°	-8.8°	7.3°
HIP ADDUCTION	9.9°	16.3°	6.4°
FEM ROT	0.8°	23.5°	22.7°
DYN VALGUS	9.5°	28.6°	19.1°
TIB ROT	1.4°	24.9°	23.5°

PAIN

LEFT	RIGHT
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ASYMMETRY

- High- L Knee Flex 61%
- High- L Ankle Flex 22%
- High- L Total Flex 59%