

TOTAL

SPPB 환산 점수

TOTAL SPPB Score

11 점
*12점 만점 기준

*Sarcopenia 진단 기준: SPPB 환산 점수 9점 이하

Balance Test ⓘ

4 점

*4점 만점 기준

Side by-side Stance	1
Semi-tandem Stance	1
Tandem Stance	2

Gait Speed ⓘ

4 점

*4점 만점 기준

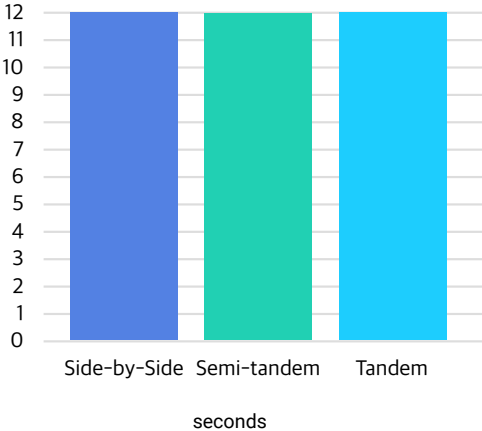
Chair Stand Test ⓘ

3 점

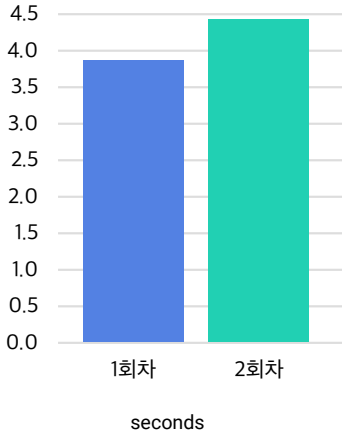
*4점 만점 기준

General

Balance Test



Gait Speed



검사	소요시간(s)
Balance Test (Side by-side Stance)	11.97
Balance Test (Semi-tandem Stance)	11.94
Balance Test (tandem Stance)	11.97
Gait Speed (trial 1)	3.86
Gait Speed (trial 2)	4.42
Chair Stand Test	12.92

Balance Test

General

Side by-Side Stance

소요시간 11.97 초

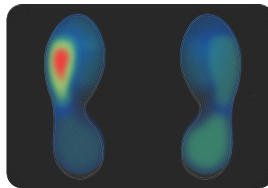
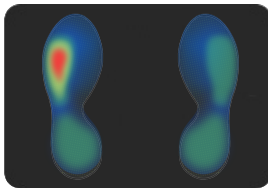
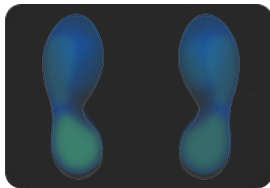
Semi-tandem Stance

소요시간 11.94 초

Tandem Stance

소요시간 11.97 초

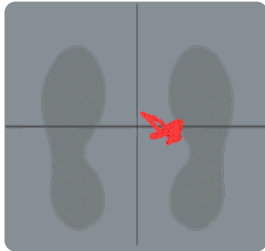
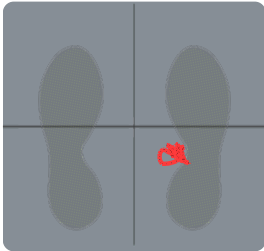
Pressure Distribution



		Side by-Side Stance		Semi-tandem Stance		Tandem Stance	
Wholefoot	Avg. pressure	L 62.6	R 84.9	L 75.1	R 67.2	L 87.1	R 61.4
	L/R symmetry ⓘ	R,7.6%		L,2.8%		L,8.7%	
Forefoot	Avg. pressure	L 23.3	R 54.6	L 37.8	R 38.1	L 65.6	R 36.7
	L/R symmetry ⓘ	R,20.1%		R,0.2%		L,14.1%	
Hindfoot	Max. pressure	30.8	64.7	158.9	77.2	385	71.9
	Avg. pressure	L 39.3	R 30.3	L 37.3	R 29.1	L 21.5	R 24.7
	L/R symmetry ⓘ	L,6.5%		L,6.2%		R,3.4%	
	Max. pressure	44.4	36.7	46	40.6	28.9	38.7

COP

(Unit: kPa)



	Side by-Side Stance	Semi-tandem Stance	Tandem Stance
Anterior Max distance ⓘ	9	8	24
Posterior Max distance ⓘ	14	33	11
A/P distance range ⓘ	23	41	35
AP displacement ⓘ	435	356	498
Left Max distance ⓘ	15	5	27
Right Max distance ⓘ	10	25	6
L/R distance range ⓘ	25	30	33
LR displacement ⓘ	361	305	482
Total COP path length (pixel) ⓘ	726.1	606.9	847
COP sway Velocity (pixel/s) ⓘ	60.7	50.8	70.8
A/P COP sway Velocity (pixel/s) ⓘ	36.3	29.8	41.6
L/R COP sway Velocity (pixel/s) ⓘ	30.2	25.5	40.3
COP 95% confidence ellipse area (pixel²) ⓘ	429	917.7	861.8

Gait Speed 2회차

General

소요시간	4.42 초	걸음수	8 걸음	분속수	109 걸음/분
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* 20~59세 남성 평균 분속수는 104.5~120.5 걸음

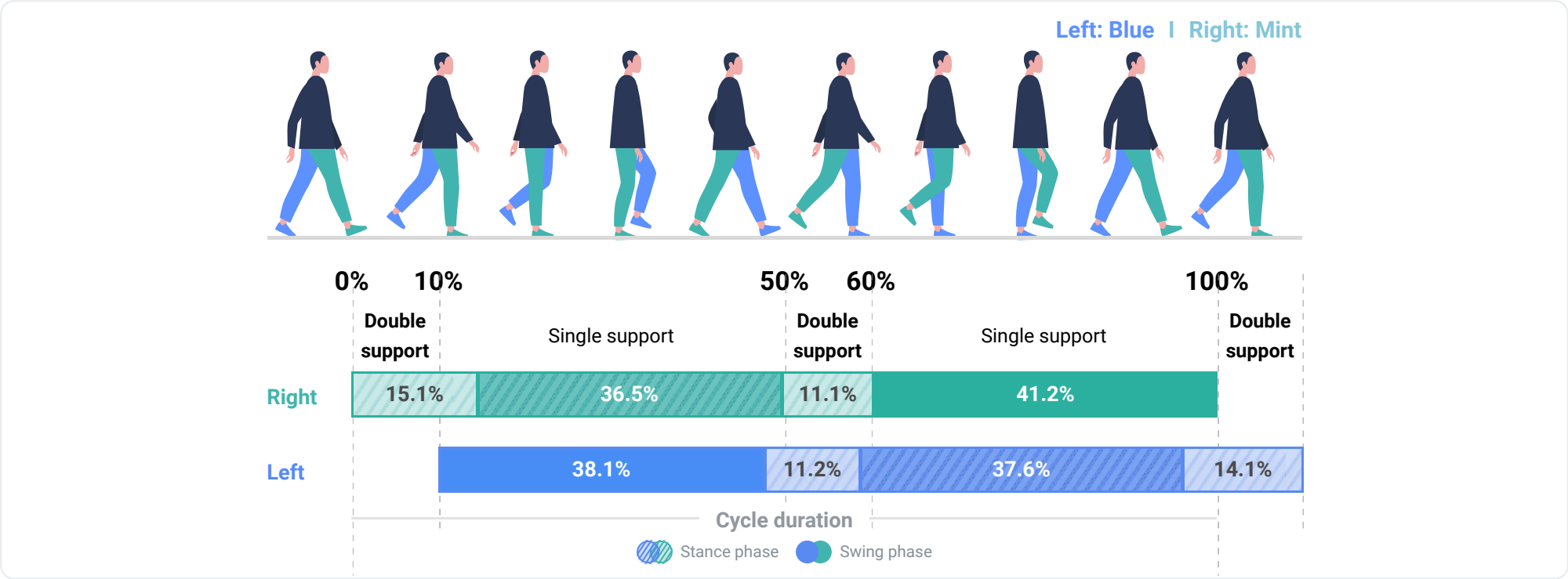
Initial Contact

왼발			오른발		
발앞부	0 %		0 %	발앞부	
발중간부	0 %		25 %	발중간부	
발뒤부	100 %		75 %	발뒤부	

좌우 GCT 밸런스 ⓘ

지면 접촉 시간 균형 L, 53.3 % "왼쪽 치우침"	왼발 지면 접촉 시간 0.8 s	오른발 지면 접촉 시간 0.7 s
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보행주기 ⓘ



Gait cycle	Stance phase (%)	Swing phase (%)	Single support (%)		Double support (%)	
			Mid stance (%)	Terminal stance (%)	Loading response (%)	Pre-swing (%)
Right	58.8 ± 7.7	41.2 ± 7.7	27.3 ± 3.8	9.2 ± 3	15.1 ± 0.8	11.1 ± 0.6
Left	61.9 ± 2.7	38.1 ± 2.7	34.5 ± 7.4	4.9 ± 3.9	11.2 ± 0.6	14.1 ± 1.2
Diff.	3.1 ± 5	3.1 ± 5	7.2 ± 3.6	4.3 ± 0.9	3.9 ± 0.2	3 ± 0.6

Time	Stride time (s)	Step time (s)	Stance time (s)	Swing time (s)	Single support time (s)		Double support time (s)	
					Mid stance time (s)	Terminal stance time(s)	Loading response time (s)	Pre-swing time (s)
Right	1.26 ± 0.02	0.61 ± 0.01	0.7 ± 0.18	0.47 ± 0.01	0.34 ± 0.04	0.12 ± 0.04	0.19 ± 0.01	0.14 ± 0.01
Left	0.18 ± 0.02	0.65 ± 0.01	0.8 ± 0.03	0.5 ± 0.07	0.43 ± 0.09	0.06 ± 0.05	0.14 ± 0.01	0.18 ± 0.02
Diff.	0.01 ± 0.01	0.04 ± 0	0.1 ± 0.15	0.02 ± 0.06	0.09 ± 0.04	0.05 ± 0.01	0.05 ± 0	0.04 ± 0.01

COP Trajectory



Pressure Distribution

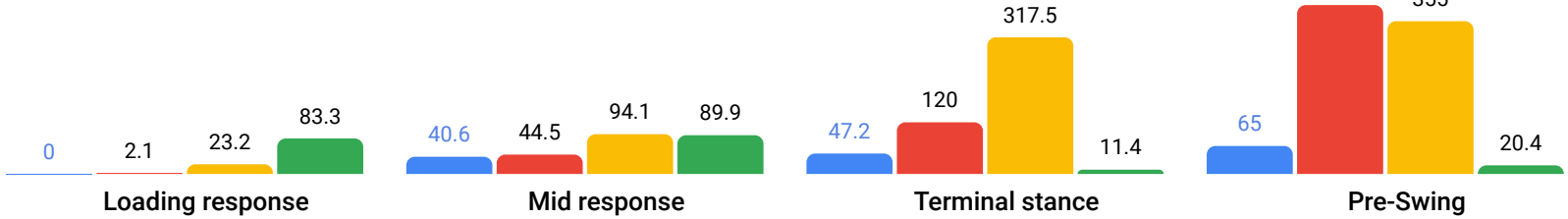
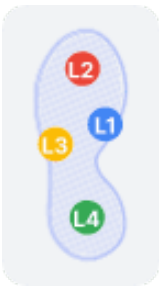


Periods

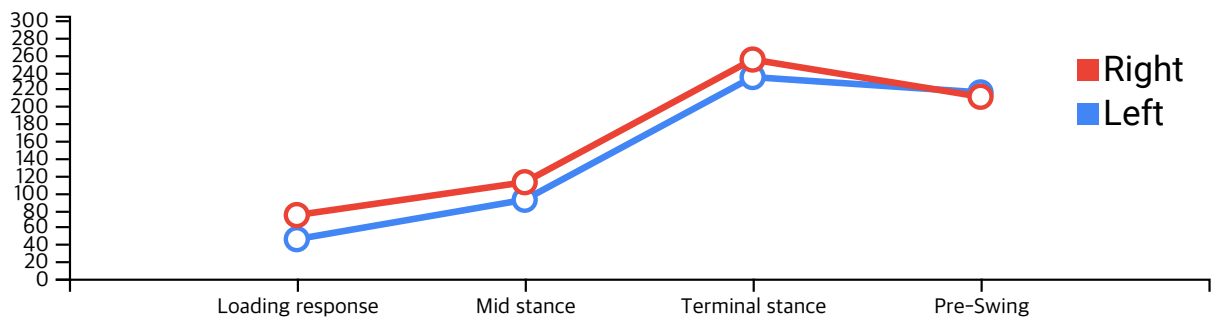
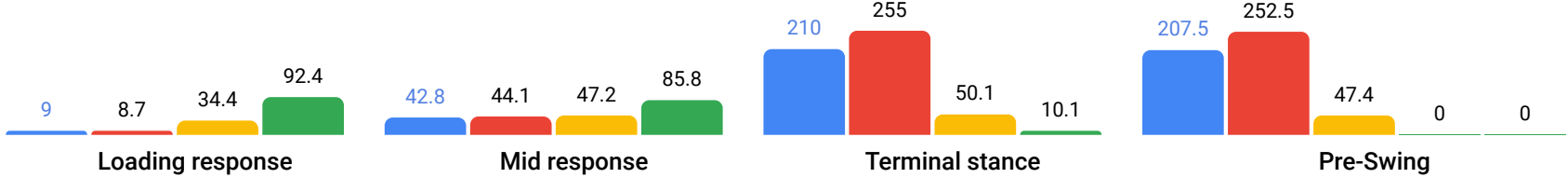
Avg.pressure

(Unit: kPa)

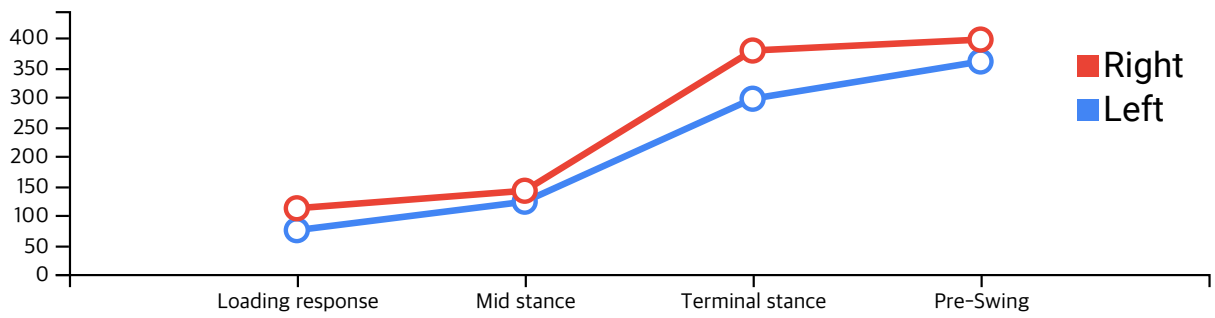
Left



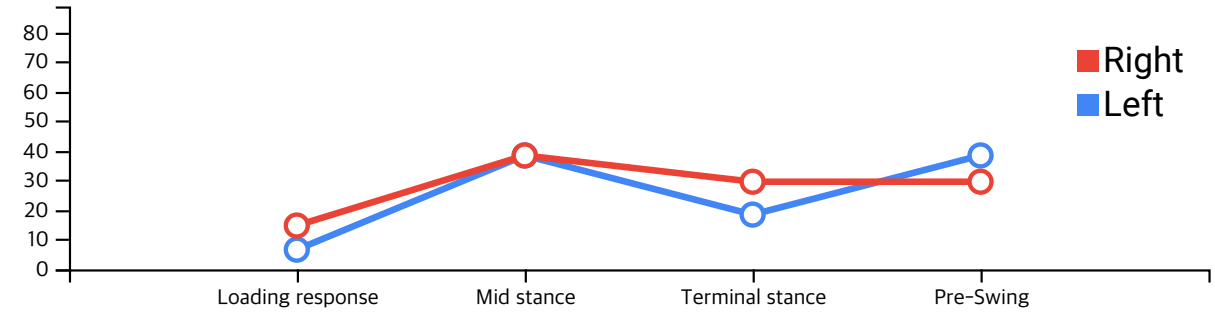
Right



Avg. pressure



Peak. pressure



Pressure-time integral (Unit: kPa*s)

Chair Stand Test

General

총 횟수(개) ⓘ

5

1회당
소요시간(s) ⓘ

1.18 ± 0.42

1회당
최대 소요시간(s) ⓘ

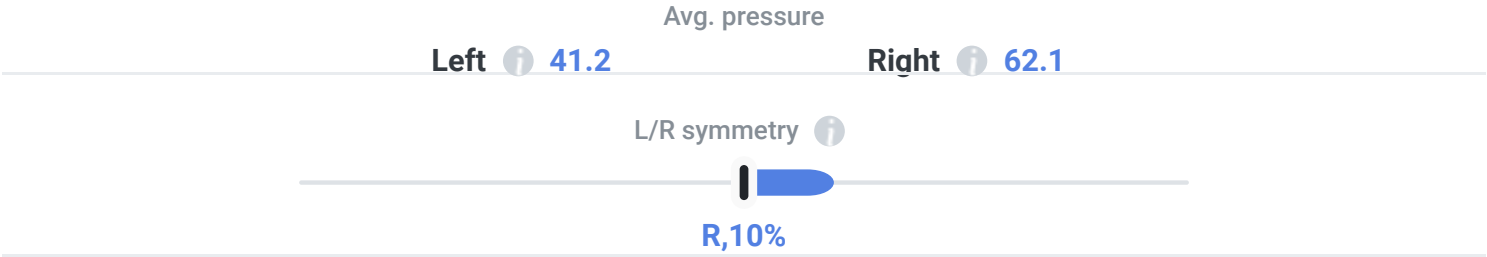
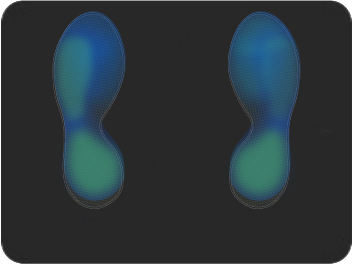
1.88

1회당
최소 소요시간(s) ⓘ

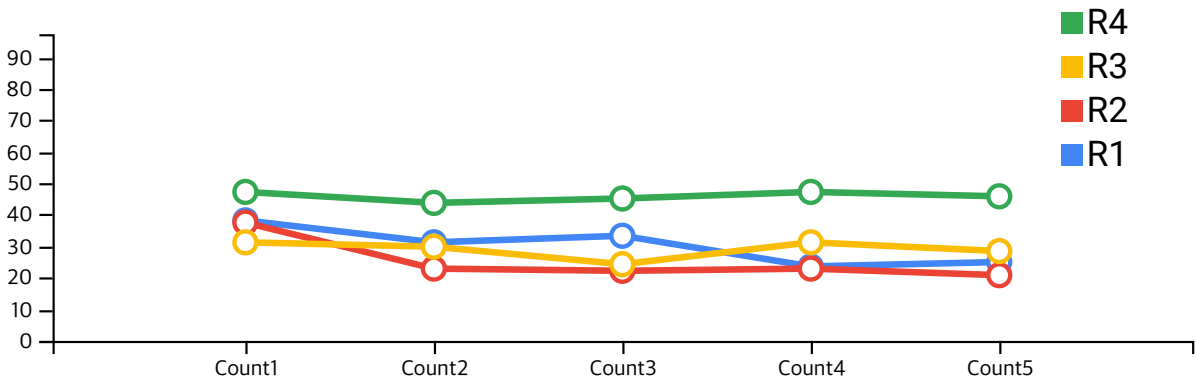
0.82

Pressure Distribution

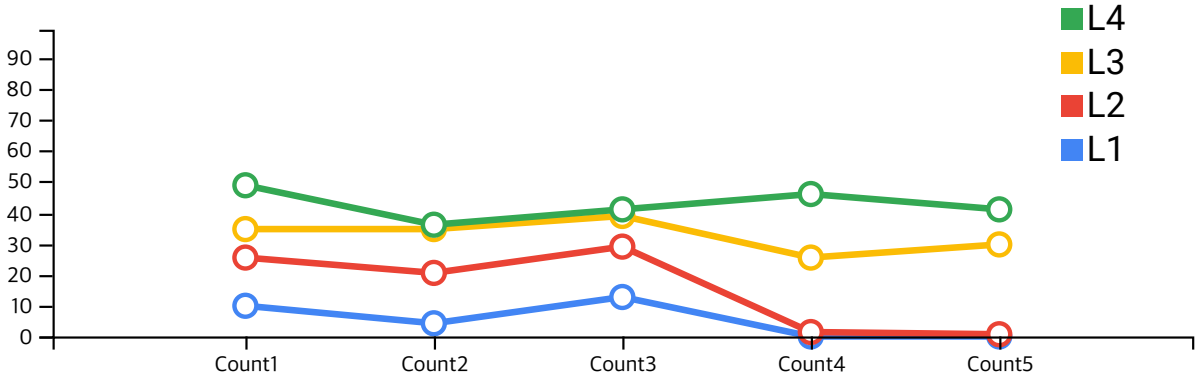
(Unit: kPa)



오른발 영역별 족저압 추이



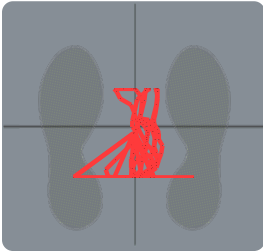
왼발 영역별 족저압 추이



	Count 1	Count 2	Count 3	Count 4	Count 5
Time	1.88(s)	0.91(s)	1.03(s)	1.25(s)	0.82(s)
Left/Right Avg.pressure	43.9 / 43.9	39 / 39	47 / 47	41.1 / 41.1	35.3 / 35.3

COP

(Unit: Pixel)



Chair Stand Test

Anterior Max distance ⓘ

50

Posterior Max distance ⓘ

50

A/P distance range ⓘ

100

AP displacement ⓘ

1352

Left Max distance ⓘ

50

Right Max distance ⓘ

50

L/R distance range ⓘ

100

LR displacement ⓘ

1049

Total COP path length ⓘ

2076.1

COP sway Velocity (pixel/s) ⓘ

160.7

A/P COP sway Velocity (pixel/s) ⓘ

104.6

L/R COP sway Velocity (pixel/s) ⓘ

81.2

COP 95% confidence ellipse area (pixel²) ⓘ

7461.3