

The purpose of this study was to analyze sprinting characteristics at the initial acceleration for the take off angles of knees, head and trunk, the running angles of trunk, stride frequencies, running speeds, and the leg power. The subjects were 10 male sprinters of the Thai national team and 10 male sprinters of Srinakharinwirot University purposively sampled. They were tested for the leg power and Video-taped for their sprinting characteristics. After the analytical techniques, it was found that

1. At the take-off position, the leading knee angles were between 86-95 degrees. The rear knee angles were between 111-120 degrees. The trunk angles were between 201-210 degrees. The head was downwards.

2. At the take-off from the starting block position, when measured at 1, 3, 5, 7, 9, 15, 20, 25 and 30 meters of running distances, the trunk angles were between 41-45, 41-45, 46-50, 51-55, 56-60, 61-65, 66-70, 71-75, 71-75 and 71-75 degrees respectively.

3. The stride frequencies at 30 meters of running distances were 18 strides.

4. The running speeds at 30 meters of running distances were 3.50-4.00 seconds.

5. The leg powers as measured by the standing broad jump testing were between 2.41-2.60 meters.