

# Optimal Mat Performance

Reviewing the mowing path taken by the mowing vehicles it can be concluded the football mat the most optimal design.

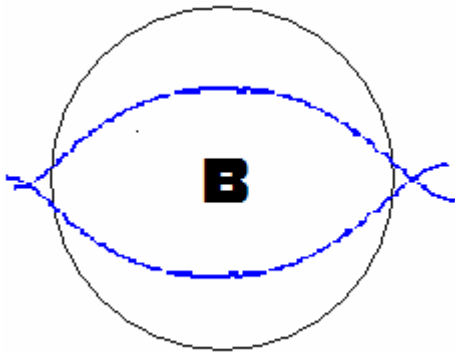
A = Recommended

B&C = Less Desirable

Mowers weave around the perimeter of a light as they proceed along a directional path down the runway or taxiway. The blue line depicts the path of a mower decks edge as it passes by a light

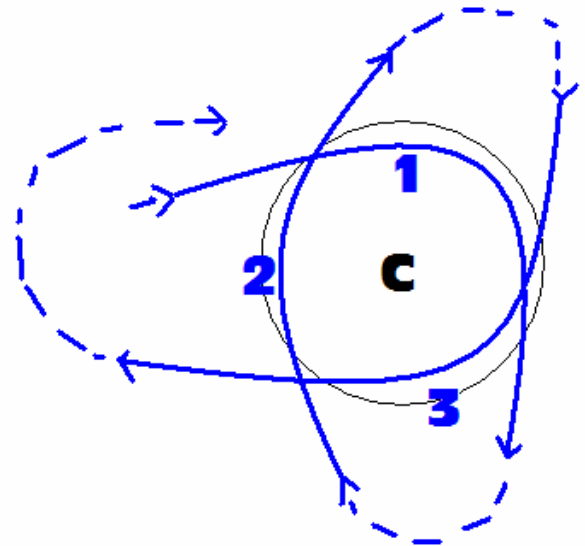


The football or elongated shaped mat complements this mowing path giving the mower perimeter a length of 7 feet and a width of 4 feet around the light.



The same path reduced to match a round mat shows that a mower decks perimeter utilizes a much smaller ratio of the mat. In the case of a 4ft diameter mat the mats effectiveness of the mowing perimeter is reduced from 7 to 4 feet length-wise and 4 to 2 feet in width. In the case of smaller mats such as a 26 inch mat the effectiveness of the mat is reduced to inches not feet.

Mower operators often find themselves taking a more frustrating approach to round mats resulting in a pattern called orbiting. This often results in mower wheels taking sharp turns on the mat and the mower is more likely to buckle or dislodge the mat.



It is recommended that Airfield Mats are installed as pictured here

