# Cost of the path found

| Case | Algorithm | | | | | |
|---|---|---|---|---|---|---|
| | | A* | | | | |
| | Dijkstra | Admissible Heuristic $\sqrt{(x-x_D)^2+\frac{1}{2}(y-y_D)^2}$ | Non Admissible Heuristic $(\lvert x-x_D\rvert+2\lvert y-y_D\rvert)$ | Diagonal distance | Manhattan Distance | Euclidean Distance |
| Case 1 | 181.0 | 181.0 | 189.0 | 181.0 | 181.0 | 181.0 |
| Case 2 | 147.610 | 147.610 | 154.823 | 147.610 | 147.610 | 147.610 |

## The time taken to find the path

| Case | Algorithm | | | | | |
|---|---|---|---|---|---|---|
| | Dijkstra | A* | | | | |
| | | Admissible Heuristic $\left(\sqrt{(x-x_D)^2+\frac{1}{2}(y-y_D)^2}\right)$ | Non Admissible Heuristic $\left(\lvert x-x_D\rvert+2\lvert y-y_D\rvert\right)$ | Diagonal Distance | Manhattan Distance | Euclidean Distance |
| Case 1 | 2.73132 | 1.87665 | 0.03927 | 1.5376 | 1.00643 | 1.52043 |
| Case 2 | 5.83462 | 2.38283 | 0.016 | 1.8156 | 0.03587 | 1.34698 |