|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CASE** | **ALGORITHM** | | | | | |
| **DIJKSTRA** | **A\*** | | | | |
| **Admissible**  **Heuristic**  **A\*(2)** | **Non**  **Admissible**  **Heuristic**  **A\*(3)** | **Diagonal**  **Distance** | **Manhattan Distance** | **Euclidean**  **Distance** |
| Case 1 | 0.6221 | 0.4736 | 0.6189 | 0.4827 | 0.4506 | 0.5075 |
| Case 2 | 0.7796 | 0.4144 | 0.7733 | 0.4758 | 0.0561 | 0.4235 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sno | ALGORITHM |  | TOTAL CELLS EXPLORED | PATH LENGTH | Efficiency |
| 1 | Dijkstra |  | 5693 | 123 | 0.021605 |
| 2 | A\*(2) | F = g + h | 2781 | 123 | 0.044228 |
| F = g + 1.5h | 483 | 123 | 0.254658 |
| F = g + 9h | 319 | 125 | 0.391849 |
| F = g +30h | 327 | 126 | 0.385321 |
| F = g+1000h | 494 | 163 | 0.329959 |
| 3 | Manhattan | F = g+h | 431 | 123 | 0.285382 |
| F = g + 5h | 329 | 125 | 0.37993 |
| F = g + 10h | 322 | 125 | 0.388198 |
| 4 | A\*(Euclidean) | F = g+h | 2763 | 123 | 0.044516 |
| F = g + 5h | 323 | 125 | 0.386996 |
| F = g + 10h | 307 | 125 | 0.407166 |