

| invk2d_analytical | | | | | | | | | | | | | | | | | |
|-------------------|--------|-----------|-------|--------------|---------|-----------|----------|--------------|--------------|--------------|----------|--------------|--------------|--------------|--|--|--|
| Desired: | | Measured: | | Theoretical: | | Actual: | | Error: | | | | | | | | | |
| x | y | x | y | theta_i | theta_o | theta_i | theta_o | distance | theta_i | theta_o | | | | | | | |
| 10 | 10 | 9.3 | 11.5 | 164 | -137 | 162 | -136 | 1.655294536 | 2 | 1 | | | | | | | |
| 13 | 16 | 14.5 | 14.1 | 112 | -79 | 111 | -80 | 2.420743687 | 1 | 1 | | | | | | | |
| -15 | 4 | -15 | 3.3 | -91 | -125 | -91 | -125 | 0.7 | 0 | 0 | | | | | | | |
| -20 | 12 | -19.05 | 13.3 | 114 | 47 | 114 | 46 | 1.610124219 | 0 | 1 | | | | | | | |
| -10 | -13 | -8.3 | -15.4 | -32 | -117 | -28.7 | -116 | 2.941088234 | 3.3 | 1 | | | | | | | |
| -18 | -5 | -17.8 | -5.3 | -88 | -97 | -87 | -99 | 0.3605551275 | 1 | 2 | | | | | | | |
| 16 | -10 | 13.8 | -12.5 | 43 | -95 | 41 | -96 | 3.330165161 | 2 | 1 | | | | | | | |
| 7 | -13 | 8.2 | -13.5 | 50 | -131 | 49 | -130 | 1.3 | 1 | 1 | | | | | | | |
| 24.95 | 0 | 24.4 | 3 | 0 | 0 | 1 | 0 | 3.05 | 1 | 0 | | | | | | | |
| 0 | 24.95 | 1.7 | 24.5 | 90 | 0 | 90 | 0 | 1.75855054 | 0 | 0 | | | | | | | |
| -24.95 | 0 | -24.7 | 2.4 | 180 | 0 | 180 | -1 | 2.412985702 | 0 | 1 | | | | | | | |
| 0 | -24.95 | 3 | -24.9 | -90 | 0 | -90 | 2 | 3.000416638 | 0 | 2 | | | | | | | |
| | | | | | | | Average: | 2.044993654 | 0.9416666667 | 0.9166666667 | | | | | | | |
| | | | | | | | Max: | 3.330165161 | 3.3 | 2 | | | | | | | |
| | | | | | | | Min: | 0.3605551275 | 0 | 0 | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| Midpoint | | | | | | | | | | | | | | | | | |
| Robot: | | Measured: | | Robot: | | Measured: | | Robot: | | Measured: | | Error: | | | | | |
| x1 | y1 | x1 | y1 | x2 | y2 | x2 | y2 | mx | my | mx | my | distance p1 | distance p2 | distance mp | | | |
| 18.9 | -0.3 | 18 | 0 | 11.75 | -10.59 | 12 | -8 | 15.33 | -5.45 | 15 | -4 | 0.9486832981 | 2.602037663 | 1.487077671 | | | |
| 12.3 | -7.87 | 12 | -8 | -0.05 | -15.48 | 0 | -15 | 6.12 | -11.67 | 6 | -11.5 | 0.3269556545 | 0.4825971405 | 0.2080865205 | | | |
| -2.31 | -16.11 | 0 | -15 | -16.01 | -8.73 | -14 | -10 | -9.16 | -12.42 | -7 | -12.5 | 2.562849976 | 2.377603836 | 2.161480974 | | | |
| -15.61 | -8.76 | -14 | -10 | -17.08 | 13.21 | -17 | 12 | -16.35 | 2.23 | -15.5 | 1 | 2.032166332 | 1.212641744 | 1.495125413 | | | |
| -16.87 | 12.55 | -17 | 12 | 18.33 | 15.06 | 18 | 15 | 0.73 | 13.8 | 0.5 | 13.5 | 0.565154846 | 0.3354101966 | 0.3780211634 | | | |
| | | | | | | | | | | | Average: | 1.287162021 | 1.402058116 | 1.145958348 | | | |
| | | | | | | | | | | | Max: | 2.562849976 | 2.602037663 | 2.161480974 | | | |
| | | | | | | | | | | | Min: | 0.3269556545 | 0.3354101966 | 0.2080865205 | | | |