|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Trial 4 | **DoF** | **Type of Trajectory** | **Mean Value of Position Error (cm or degree)** | | | | | | | | |
|  |  | C-arm  Lateral (cm) | C-arm  Vertical (cm) | C-arm  Wigwag (degree) | C-arm  Horizontal (cm) | C-arm  Tilt (degree) | C-arm  Orbital (degree) | Table  Vertical (cm) | Table  Longitudinal (cm) | Table  Transverse (cm) |
| 9 | Trapezoidal Velocity  Profile Trajectory | -0.0241±0.0001 | -0.0111±0 | 0.0012±0 | -0.0001±0.0025 | -0.0076±0 | -0.0077±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Polynomial Trajectory | -0.0244±0.0001 | -0.0111±0 | 0.0012±0 | 0±0.0025 | -0.0075±0 | -0.0076±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Minimum Jerk  Polynomial Trajectory | -0.0241±0.0001 | -0.0111±0 | 0.0012±0 | 0.0057±0.0025 | -0.0076±0 | -0.0076±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Minimum Snap  Polynomial Trajectory | -0.0243±0.0001 | -0.0111±0 | 0.0012±0 | 0.0001±0.0025 | -0.0076±0 | -0.0076±0 | -0.0032±0 | 0.0201±0 | 0.009±0 |
| 8 | Trapezoidal Velocity  Profile Trajectory | -0.0215±0.0005 | -0.0121±0 | 0.0011±0 | 0.0032±0.0013 | -0.006±0 | -0.0063±0.0001 | -0.0053±0 | 0.0107±0 |  |
| Polynomial Trajectory | -0.0219±0.0005 | -0.0121±0 | 0.0011±0 | 0.0032±0.0013 | -0.0061±0 | -0.0061±0.0001 | -0.0053±0 | 0.0107±0 |  |
| Minimum Jerk  Polynomial Trajectory | -0.0223±0.0005 | -0.0121±0 | 0.0012±0 | 0.0006±0.0013 | -0.006±0 | -0.0061±0.0001 | -0.0053±0 | 0.0107±0 |  |
| Minimum Snap  Polynomial Trajectory | -0.0227±0.0005 | -0.0121±0 | 0.0012±0 | 0.0007±0.0013 | -0.006±0 | -0.0061±0.0001 | -0.0053±0 | 0.0107±0 |  |
| 7 | Trapezoidal Velocity  Profile Trajectory | -0.0014±0 | -0.0113±0 | -0.0011±0 | 0.0032±0.0003 | -0.0075±0 | -0.0077±0 | 0.0156±0 |  |  |
| Polynomial Trajectory | -0.0013±0 | -0.0113±0 | -0.0011±0 | 0.0037±0.0003 | -0.0075±0 | -0.0078±0 | 0.0156±0 |  |  |
| Minimum Jerk  Polynomial Trajectory | -0.0013±0 | -0.0113±0 | -0.0011±0 | 0.0031±0.0003 | -0.0075±0 | -0.0077±0 | 0.0156±0 |  |  |
| Minimum Snap  Polynomial Trajectory | -0.0014±0 | -0.0113±0 | -0.0011±0 | 0.0029±0.0003 | -0.0075±0 | -0.0077±0 | 0.0156±0 |  |  |
| Trial 5 | 9 | Trapezoidal Velocity  Profile Trajectory | -0.0064±0.0002 | -0.0123±0 | -0.0043±0.0001 | 0.0013±0.0003 | 0.0046±0 | 0.0083±0 | -0.0062±0 | 0.0242±0 | 0.0103±0 |
| Polynomial Trajectory | -0.0063±0.0002 | -0.0123±0 | -0.0044±0.0001 | 0.0006±0.0003 | 0.0046±0 | 0.0082±0 | -0.0062±0 | 0.0242±0 | 0.0103±0 |
| Minimum Jerk  Polynomial Trajectory | -0.0059±0.0002 | -0.0123±0 | -0.0045±0.0001 | 0.0014±0.0003 | 0.0046±0 | 0.0082±0 | -0.0062±0 | 0.0242±0 | 0.0103±0 |
| Minimum Snap  Polynomial Trajectory | -0.0063±0.0002 | -0.0123±0 | -0.0045±0.0001 | 0.0013±0.0003 | 0.0046±0 | 0.0082±0 | -0.0062±0 | 0.0242±0 | 0.0103±0 |
| 8 | Trapezoidal Velocity  Profile Trajectory | -0.0096±0.0002 | -0.0123±0 | -0.0015±0.0001 | 0.0025±0.0004 | 0.0046±0 | 0.0082±0 | -0.0063±0 | 0.0103±0 |  |
| Polynomial Trajectory | -0.0097±0.0002 | -0.0123±0 | -0.0015±0.0001 | 0.0016±0.0004 | 0.0046±0 | 0.0082±0 | -0.0063±0 | 0.0103±0 |  |
| Minimum Jerk  Polynomial Trajectory | -0.0092±0.0002 | -0.0123±0 | -0.0015±0.0001 | 0.0015±0.0004 | 0.0046±0 | 0.0082±0 | -0.0063±0 | 0.0103±0 |  |
| Minimum Snap  Polynomial Trajectory | -0.0098±0.0002 | -0.0123±0 | -0.0013±0.0001 | 0.0014±0.0004 | 0.0046±0 | 0.0082±0 | -0.0063±0 | 0.0103±0 |  |
| 7 | Trapezoidal Velocity  Profile Trajectory | -0.0137±0.0004 | -0.0113±0 | -0.0011±0 | 0.0032±0.0003 | -0.0075±0 | -0.0077±0 | 0.0156±0 |  |  |
| Polynomial Trajectory | -0.0135±0.0004 | -0.0113±0 | -0.0011±0 | 0.0037±0.0003 | -0.0075±0 | -0.0076±0 | 0.0156±0 |  |  |
| Minimum Jerk  Polynomial Trajectory | -0.0128±0.0004 | -0.0113±0 | -0.0011±0 | 0.0031±0.0003 | -0.0075±0 | -0.0076±0 | 0.0156±0 |  |  |
| Minimum Snap  Polynomial Trajectory | -0.0139±0.0004 | -0.0113±0 | -0.0011±0 | 0.0029±0.0003 | -0.0075±0 | -0.0076±0 | 0.0156±0 |  |  |
| 6 | Trapezoidal Velocity  Profile Trajectory | -0.0301±0.0004 | -0.0162±0 | -0.0002±0 | -0.0159±0.0002 | 0.0009±0 | 0.0002±0 |  |  |  |
| Polynomial Trajectory | -0.029±0.0004 | -0.0162±0 | -0.0002±0 | -0.016±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| Minimum Jerk  Polynomial Trajectory | -0.0291±0.0004 | -0.0162±0 | -0.0002±0 | -0.0156±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| Minimum Snap  Polynomial Trajectory | -0.0291±0.0004 | -0.0162±0 | -0.0002±0 | -0.0156±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| 5 | Trapezoidal Velocity  Profile Trajectory |  | -0.0131±0 | -0.0011±0 | -0.0015±0.0021 | 0.0062±0 | 0.0111±0 |  |  |  |
| Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | 0.0034±0.0021 | 0.0062±0 | 0.0111±0 |  |  |  |
| Minimum Jerk  Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | -0.0015±0.0021 | 0.0062±0 | 0.0112±0 |  |  |  |
| Minimum Snap  Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | -0.0015±0.0021 | 0.0062±0 | 0.0112±0 |  |  |  |
| Trial 6 | 9 | Trapezoidal Velocity  Profile Trajectory | -0.0241±0.0001 | -0.0121±0 | 0.0012±0 | -0.0001±0.0007 | -0.0076±0 | -0.0077±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Polynomial Trajectory | -0.0244±0.0001 | -0.0121±0 | 0.0012±0 | 0±0.0007 | -0.0075±0 | -0.0076±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Minimum Jerk  Polynomial Trajectory | -0.0241±0.0001 | -0.0121±0 | 0.0012±0 | 0.0016±0.0007 | -0.0076±0 | -0.0076±0 | -0.0032±0 | 0.0202±0 | 0.009±0 |
| Minimum Snap  Polynomial Trajectory | -0.0243±0.0001 | -0.0121±0 | 0.0012±0 | 0.0014±0.0007 | -0.0076±0 | -0.0076±0 | -0.0032±0 | 0.0201±0 | 0.009±0 |
| 8 | Trapezoidal Velocity  Profile Trajectory | -0.0233±0.0003 | -0.0123±0 | -0.0003±0 | 0.0016±0.0002 | 0±0 | -0.0071±0 | -0.0057±0 | 0.0105±0 |  |
| Polynomial Trajectory | -0.0237±0.0003 | -0.0123±0 | -0.0003±0 | 0.0011±0.0002 | 0±0 | -0.0071±0 | -0.0057±0 | 0.0105±0 |  |
| Minimum Jerk  Polynomial Trajectory | -0.0238±0.0003 | -0.0123±0 | -0.0003±0 | 0.0014±0.0002 | 0±0 | -0.0071±0 | -0.0057±0 | 0.0105±0 |  |
| Minimum Snap  Polynomial Trajectory | -0.024±0.0003 | -0.0123±0 | -0.0003±0 | 0.0011±0.0002 | 0±0 | -0.0071±0 | -0.0057±0 | 0.0105±0 |  |
| 7 | Trapezoidal Velocity  Profile Trajectory | -0.0178±0.0003 | -0.0123±0 | 0.0011±0 | 0.0017±0.0003 | 0±0 | -0.0071±0 | 0.0146±0 |  |  |
| Polynomial Trajectory | -0.0173±0.0003 | -0.0123±0 | 0.0011±0 | 0.0018±0.0003 | 0±0 | -0.0071±0 | 0.0146±0 |  |  |
| Minimum Jerk  Polynomial Trajectory | -0.0171±0.0003 | -0.0123±0 | 0.0011±0 | 0.0023±0.0003 | 0±0 | -0.0071±0 | 0.0146±0 |  |  |
| Minimum Snap  Polynomial Trajectory | -0.0169±0.0003 | -0.0123±0 | 0.0011±0 | 0.0025±0.0003 | 0±0 | -0.0071±0 | 0.0146±0 |  |  |
| 6 | Trapezoidal Velocity  Profile Trajectory | -0.0301±0.0004 | -0.0162±0 | -0.0002±0 | -0.0159±0.0002 | 0.0009±0 | 0.0002±0 |  |  |  |
| Polynomial Trajectory | -0.029±0.0004 | -0.0162±0 | -0.0002±0 | -0.016±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| Minimum Jerk  Polynomial Trajectory | -0.0291±0.0004 | -0.0162±0 | -0.0002±0 | -0.0156±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| Minimum Snap  Polynomial Trajectory | -0.0291±0.0004 | -0.0162±0 | -0.0002±0 | -0.0156±0.0002 | 0.0008±0 | 0.0001±0 |  |  |  |
| 5 | Trapezoidal Velocity  Profile Trajectory |  | -0.0131±0 | -0.0011±0 | 0.0004±0.0002 | 0.0062±0 | 0.0112±0.0001 |  |  |  |
| Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | 0.0004±0.0002 | 0.0063±0 | 0.0113±0.0001 |  |  |  |
| Minimum Jerk  Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | 0.0001±0.0002 | 0.0062±0 | 0.0112±0.0001 |  |  |  |
| Minimum Snap  Polynomial Trajectory |  | -0.0131±0 | -0.0011±0 | 0.0001±0.0002 | 0.0062±0 | 0.0112±0.0001 |  |  |  |