Rocket Design



Rocket Stages: 1

Mass (with motor): 1249 g

Stability: 1.94 cal CG: 61.3 cm CP: 69 cm

819-J354-WH-16A-13

| Altitude | 3388 m | | |
|---------------------------|----------|--|--|
| Flight Time | 179 s | | |
| Time to Apogee | 20.2 s | | |
| Optimum Delay | 17.7 s | | |
| Velocity off Pad | 28.8 m/s | | |
| Max Velocity | 593 m/s | | |
| Velocity at Deployment | 22.8 m/s | | |
| Landing Velocity | 9.11 m/s | | |

| Motor | Avg Thrust | Burn Time | Max Thrust | Total Impulse | Thrust to Wt | Propellant Wt | Size |
|---------------|------------|-----------|------------|---------------|--------------|---------------|--------------|
| 819- J354- | 353 N | 2.32 s | 520 N | 819 Ns | 28.84:1 | 458 g | 38/421 mm |
| WH-16A | | | | | | | |
| | | | | | | | |

I170-Classic-14

| Altitude | 2023 m | | |
|---------------------------|----------|--|--|
| Flight Time | 131 s | | |
| Time to Apogee | 17 s | | |
| Optimum Delay | 14.4 s | | |
| Velocity off Pad | 17.9 m/s | | |
| Max Velocity | 366 m/s | | |
| Velocity at Deployment | 21 m/s | | |
| Landing Velocity | 8.42 m/s | | |

| Motor | Avg Thrust | Burn Time | Max Thrust | Total Impulse | Thrust to Wt | Propellant Wt | Size |
|---------|------------|-----------|------------|---------------|--------------|---------------|--------|
| I170- | 160 N | 2.36 s | 207 N | 379 Ns | 18.92:1 | 188 g | 38/245 |
| Classic | | | | | | | mm |
| | | | | | | | |





