



# ILRS Retroreflector Standards for GNSS Satellites

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- Retroreflector payloads for GNSS satellites in the neighborhood 20,000 km altitude should have a minimum “effective cross-section” of 100 million sq. meters (5 times that of GPS-35 and -36)
- Retroreflector payloads for GNSS satellites in higher or lower orbits should have a minimum “effective cross-section” scaled to compensate for the  $R^4$  increase or decrease in signal strength
- The parameters necessary for the precise definition of the vectors between the effective reflection plane, the radiometric antenna phase center and the center of mass of the spacecraft should be specified and maintained to support a range accuracy of better than 0.1 ppb.