The mean distance at which the pedestrian was first recog- nised was analysed using a three-way linear mixed effects model with the factors of Age (with two levels: Young and Old), distracters (with three levels: None, Visual and Audi- tory) and Clothing (with two levels: Vest and Biomotion), Night-time pedestrian recognition with subjects as a random factor, and condition order as a continuous covariate.An analysis of the visual predictors of the mean distance at which pedestrians were first recognised (after collapsing across the clothing and distracter variables), revealed that visual acuity, contrast sensitivity and motion sensitivity were all significant bivariate predictors, as was the UFOV test 3 (selective attention; see Table 2).The mean letter contrast sensitivity and motion sen- sitivity were also significantly worse for the older group, but differences in performance on the UFOV were signifi- cantly slower only for the selective attention subtest, but not for visual processing speed or divided attention sub- tests.To examine which of the visual func- tion measures best predicted the overall mean recognition distance for each participant, Pearson bivariate correlations and Pearson partial correlations (controlling for driver age) were conducted.Response distances were also affected by the presence or absence of distracters ($F_{2,29.56} = 5.254$, $p = 0.011$) such that the visual distracter condition resulted in significantly shorter recognition distances than the audio distracter condition (189.7 vs 219.39 m) but the audio and baseline conditions (207.71 m) did not differ significantly.To determine whether the relationship between the visual measures and pedestrian recognition distance were driven purely by ageing, partial correlations were also con- ducted with age as a covariate (Table 2).All data met the assumptions of normality and homogeneity of variance, and multivariate tests of sig- nificance were employed to rule out problems associated with sphericity.The partial