Contact analog head-up displays (cHUDs) enable the presentation of augmented reality (AR) information in the driver's primary field of view and are a promising display innovation in light of the increasing degree of assistance and automation in modern cars. As cHUD technology still faces several limitations, robust and error-tolerant display concepts are required. Four design variations (cut-off, no cut-off, tilt, 2D) of two display concepts (boomerang, arrow) for contact analog navigation were realized in a mock-up setting in which the virtual cHUD image was overlaid on a video recording of a real driving scene. Thirty participants (within-subjects design) rated attractiveness, positional accuracy, functionality, clearness/unambiguousness, distraction, quality of 3D representation, interpretability, and intuitiveness. The results suggest that the variation tilt cannot be recommended for application in an automotive cHUD. The boomerang concept was preferred over the arrow concept. The results have important implications for the design of contact analog information in an automotive cHUD.