

**Figure S3: Robustness of CP CD estimate**

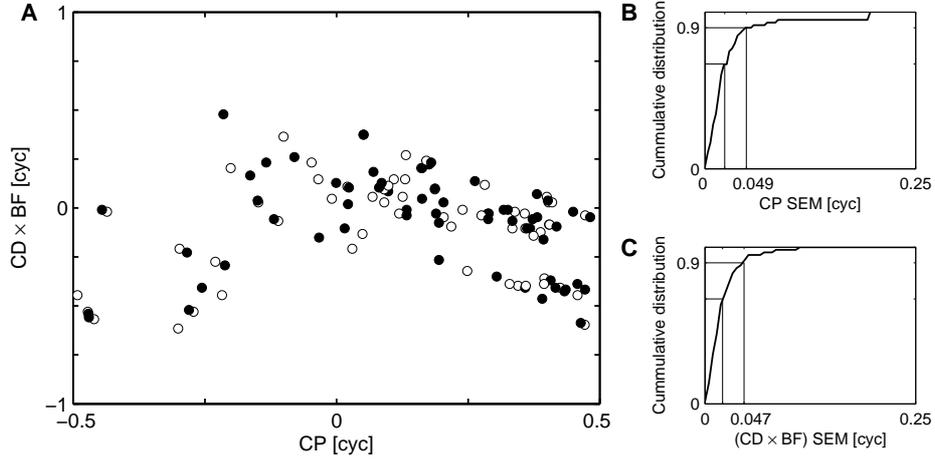


Figure S3: (A) Measured distribution (white) and one example of a surrogate distribution (black) obtained by randomly generating spike counts from a Gaussian distribution with cell-specific mean and variance. (B,C) Four surrogate spike counts (like in A) were generated for each cell and used to derive cell-wise standard errors of the mean (SEM) for CP and  $CD \times BF$ . (B) Cumulative distribution of SEM for CP ( $N = 66$  cells). Vertical lines indicate the SEM values of about 0.023 cyc. and 0.049 cyc. at the 67% and 90% quantile, respectively. (C) Same as B for  $CD \times BF$ , with SEM values 0.022 cyc. and 0.047 cyc. at the 67% and 90% quantiles.