Design

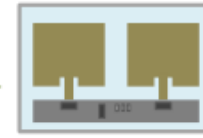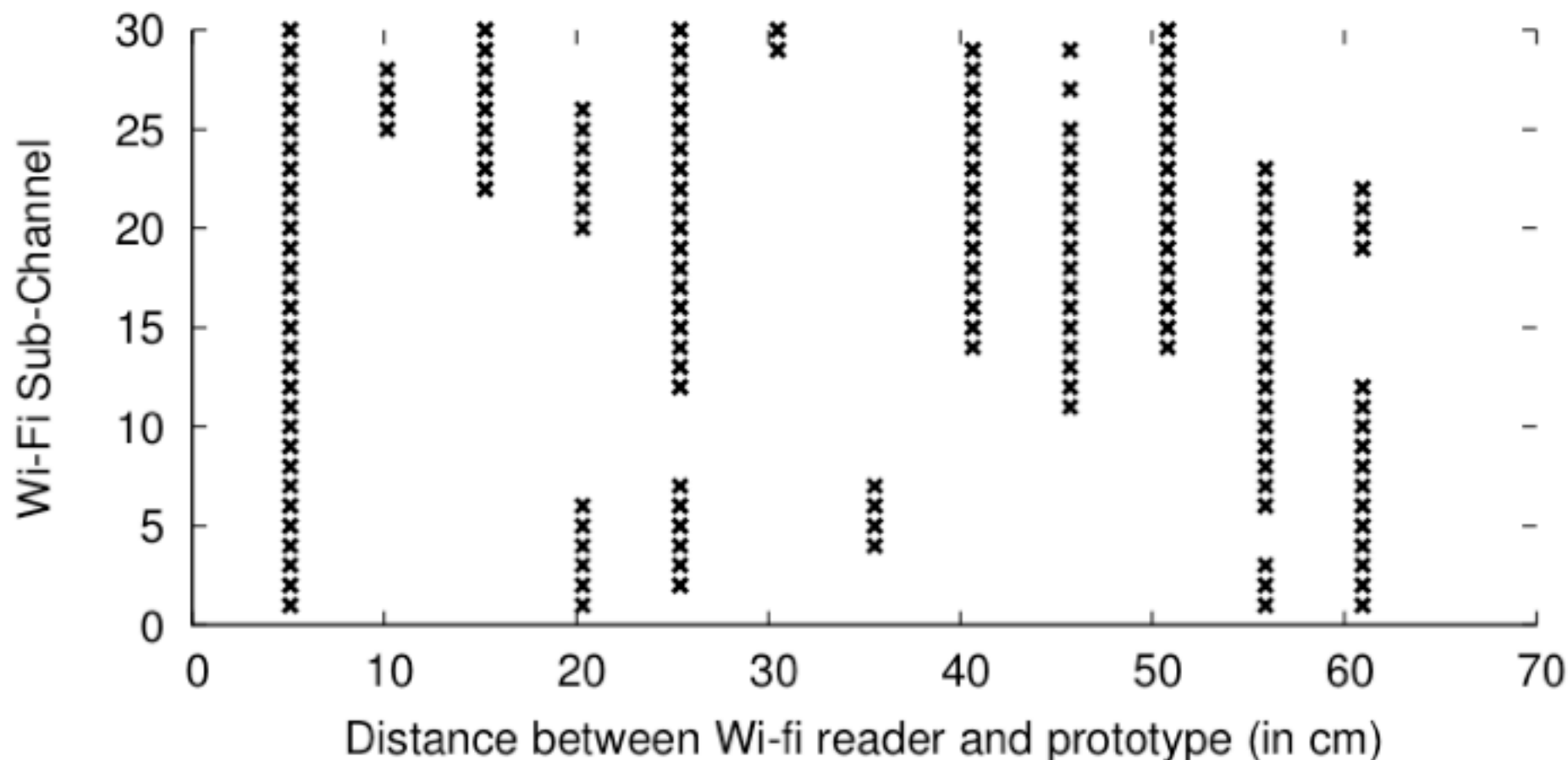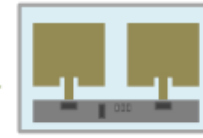## Uplink communication - from tag to reader

Adjacent pair of the 60 OFDM subcarriers |

- However **not every sub-channel** can observe such obvious amplitude deviation, the best sub-channel **seems distance-dependent**. (Following marks out the acceptable sub-channels)

Design

- However **not every sub-channel** can observe such obvious amplitude deviation, the best sub-channel **seems distance-dependent**.

- Step 2: find out good sub-channels & combining them into one

  - Before the Tag msgs the reader, it will also <u>send a shared preamble.</u>

  - Reader listens all of the sub-channel and find out the top 10 sub-channels that has <u>the best quality of the preamble</u>

  - for the msg body, using average (weighted by noise variance) of the measurement from these 10 good sub-channels.