FAP positions in yellow represent that the system performance will be almost same by deploying FAP on either of these positions. FAP positions in blue are the recommended optimal ones in each scenario.

The results in Fig. 8(a) shows that at least 1-2 FAP(s) are always required near the wall that faces the outdoor interference source, and this should be on the floor with a similar height to the height of the interfering micro-cell-site. The other FAPs should be deployed on other floors at the far corners in alternating pattern to minimise the interference. The positions of the FAPs in blue have to be fixed while one of the FAPs in yellow can be selected as the last FAP position. A design principle can be summarised as follows:

1. In the presence of no strong outdoor interference, deploy a single FAP at centre of building. In the presence of outdoor micro-cell interference, deploy the FAP near the wall that is closest to the outdoor interference source. The floor level should be one that is closest to the height of the micro-cell.

2. Any single additional FAP should be deployed also near the aforementioned wall on the same floor, but not in the same room as the first FAP.

3. Any multiple additional FAPs should be deployed not on the same floor, and at the opposite side of the building in corner rooms. These FAPs should not be on the same floor as FAPs placed in Step 1 and 2 and with each other in Step 3.

4. Any additional FAPs that do not satisfy rule 3. is likely to cause energy inefficiency.