Scenarios considered:

Random Obstacle (RO), Office Space (OS), Domestic Environment (DE)

Planning parameters:

- The footprint of the map $\rightarrow 10m \times 10m \times 2.5\ m$

- $|X_{i+1} - X_i| = \Delta p \rightarrow 0.1\ m$

- $\Delta d_h \rightarrow 0.05\ m$

- Resolution of the Occupancy Grid (OG) $\rightarrow 4\ cells/meter$

- Threshold for free cell in OG $\rightarrow 0.5$

- Reference frame of the point cloud data (RPC) $\rightarrow (0.0, 0.0, 0.0)\ and\ (1.0, 0.0, 0.0, 0.0)$

- Maximum range from the RPC $\rightarrow 15\ m$

Dimension of the subset from the current robot pose: