A given subset A of natural numbers is said to be complete if every element of $\mathbb{N}$ is the sum of distinct terms taken from A. In higher dimension the definition is similar: for any $X \subseteq \mathbb{N}^k$ let $FS(X) := \{\sum_{i=1}^{\infty} \varepsilon_i x_i : \ x_i \in X, \ \varepsilon_i \in \{0,1\}, \ \sum_{i=1}^{\infty} \varepsilon_i < \infty\}$. We say that a set X is *complete respect to the region* $R \subseteq \mathbb{N}^k$ if $R \subseteq FS(X)$ holds. A set X is a *thin complete set* of R if the counting function $X(N) \leq k \log_2 R(N) + t_X$ for some t_X and $FS(X) \supseteq R$. We construct 'thin' complete set provided the domain R does not contain half-lines parallel to the axis.

We investigate the distribution of the subset sum of 'splitable' sets, the structure of $FS(\{a_m\} \times \{b_k\})$ where $\{a_m\}$ is dense and modular version too.