Laguerre tessellation is a type of generalisation of the Voronoi diagram, enabling to describe some tessellations with relatively little information. It can be shown that any tessellation in three and more dimensions, complying with certain easily definable criteria, is a Laguerre tessellation. This thesis follows a journal proof, completes missing steps and bypasses places, which could not be proven. The thesis uses a convex piecewise-linear function instead of the orthogonal dual used in the original article, making the proof less demanding of geometrical intuition.