These Bachelor thesis aim to extend Collection of Solved Problems in Physics by adding tasks to chapter wave optics and widening newly opened chapter named Optics. This collection is created at the Department of Physics Education. Twenty two tasks were prepared within this thesis and they are included in individual subsections of Wave optics chapter. Each task includes a structured solution and most of them newly drawn pictures. There is a brief description of the collection and characterization of all prepared tasks in the text of the thesis. Four tasks including their structured solution are shown in supplement. All tasks can be found on enclosed CD or on the website of Collection of Solved Problems in Physics <a href="http://fyzikalniulohy.cz/">http://fyzikalniulohy.cz/</a>.