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Sommario/riassunto	In this work, two methods are developed and evaluated to integrate and test functional chains of automotive lighting functions on simulation-based test systems. The focus is initially on an approach for the efficient use of light for the display of high contrasts in virtual night driving with a real driver assistance camera. Furthermore, a test method is developed to evaluate pixel-based lighting functions on a hardware-in-the-loop test system based on metrics. In this work, two methods to stimulate and test automotive front lighting functions on simulation-based test benches are developed and evaluated. The first approach deepens the idea to reach necessary high contrasts for virtual night driving with a real driver assistance camera by an efficient use of reflecting light. Furthermore, a test method is shown to test pixel-based lighting functions based on metrics on a hardware-in-the-loop test bench.