汽车红外夜视系统的应用研究

郝鹏飞1

（1.中国第一汽车股份有限公司技术中心，长春市 130011）

摘要：近光灯的照射范围一般在40m～50m，在夜间能见度较低的情况下，由于视距不远、人眼的暗视觉等原因，驾驶员很难通过肉眼对暗处的人或者生物进行准确判断。如何在现有的条件下通过红外辅助照明提升夜间行车视距范围成为了设计者研究的热点。本文即通过对红外照明设计中涉及到的红外光源的选用、摄像头的匹配、成像质量等方面进行研究，从而指导红外夜视系统在汽车上的应用。

关键词：红外 夜视系统

The application study on IR night Vision for Automotive

**Abstract：**Generally，the irradiation range of low beam is about 40m~50m，Because drivers are hardly to recognize person or animal due to the short visible distance and the scotopic vision in poor visible conditions.How to enhance the visible distance by using IR emitter is the hotpot of researchers.This paper studies the infrared emitter design by the choosing of light source、the matching of camera and the imaging quality.etc.,and will guide the application of IR emitter in the vehicle.

**Key words：** IR ;Night vision