Social Activities

Activities to Improve Safety and Security

The KOITO Group's basic management policy is to create customer needs and contribute to the progress of society, guided by the theme of "Light." Identifying "reduction of traffic accidents" as one of our materiality, the KOITO Group develops products which contribute to materialize a safe and secured automotive society under our corporate message "Lighting for Your Safety."

To further improve the performance of LED headlamps and ADBs, we are also promoting R&D activities on Advanced Driving Assistance System (ADAS), next-generation lamps and various sensors (LiDAR, cameras, etc.) which are compatible with autonomous driving.

The KOITO Group will continue to contribute to the improvement of safety and security in an automotive society through developing and supplying safe and high-quality products and services using our technologies.

Development of Technologies and Products Contribute to Improve Safety and Security

●LED Headlamps

KOITO has been developing high-output and high-performance light sources to create headlamps that provide brighter light to greater distances for safe nighttime driving.

LED headlamps are KOITO's main products. They help drivers to gain clear night views as they are bright, turn on instantly and are close to daylight. KOITO is also developing laser headlamps to further improve distance visibility.

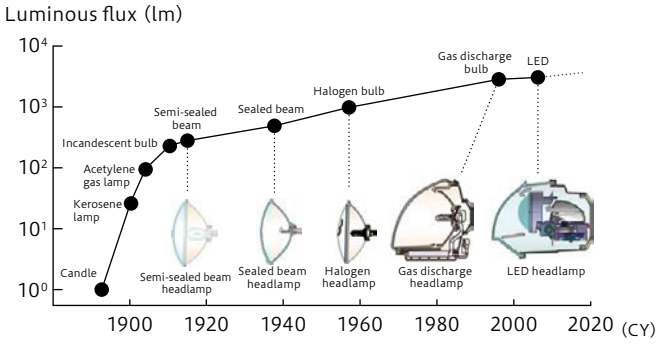
●Adaptive Driving Beam (ADB)

KOITO has developed a headlamp system called Adaptive Driving Beam (ADB) that automatically controls the light distribution pattern of the high beam and ensures wide front visibility for drivers by enabling driving with high beams all the time while preventing preceding or oncoming vehicles from glare.

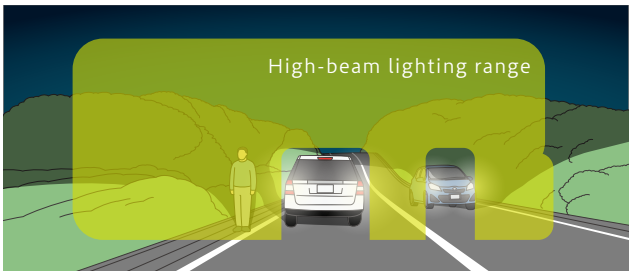
In addition, KOITO is conducting R&D activities on ADB to further improve safety during nighttime driving by providing finer light distribution.

▶ Please refer to the Growth Strategies from P.18 to P.19 of this report.

■Evolution of light sources



■Image of ADB photometry

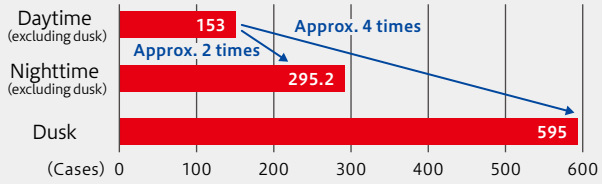


High Beam Contributes to Reduce Accident Mortality

The number of traffic accident deaths in Japan is about 3,000 per year. Among them, fatal accidents occur most frequently at dusk, from 17 to 19 o'clock, and in particular, "vehicle-to-pedestrian" accidents occur two to four times larger than those in daytime. It can be inferred that deterioration of drivers' visibility can be one of the causes for traffic accidents with pedestrians. In addition, an analysis of "vehicle-to-pedestrian" fatal accidents occurrence shows that a considerable number of accidents were likely to have been avoided if the driver had utilized high beam.

High beam, which allows drivers to detect pedestrians from a greater distance, is effective in preventing traffic accidents in dark driving conditions.

■Number of "vehicle-to-pedestrian" death accidents by time period (2015–2019 cumulative)



■Probability of collision avoidance by high beam

*Prepared based on the National Police Agency's "Prevention of Nighttime Pedestrians Accidents through the Advanced Use of High Beam" https://www.npa.go.jp/bureau/traffic/anzen/highbeam.html