

THE GLARE EFFECT OF THE HEADLAMP OF ON-COMING VEHICLE ON DRIVER'S VISIBILITY

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ABSTRACT

THE MAIN FUNCTION OF THE CAR FRONT LAMP IS FOR DRIVER TO SEE CLEARLY ON THE ROAD WHEN DRIVING IN THE NIGHTTIME. ACTUALLY THERE ARE MANY CARS ON THE SAME DIRECTION OR OPPOSITE SIDE ON THE ROAD. THEREFORE, THE TIME TO PROJECT LIGHT UPON THE ROAD ALSO IS ABLE TO IRRADIATE ON THE DRIVER'S EYE WHOM IN THE OPPOSITE SIDE. IT INFLUENCES DRIVER'S RECOGNITION OF ROAD. SO THAT, THE DESIGN FOR LAMP OF VEHICLE NOT ONLY CONSIDERED THE FIELD OF VISION ON DRIVER BUT ALSO MUST CONSIDERING THE DRIVER WHO IS ON THE OPPOSITE SIDE. ALTHOUGH THE CNS REGULATION RULE ANGLE ILLUMINATIVE AND HIGH DEGREE OF COVERAGE, BUT EACH OF CAR MANUFACTURE AND REFITTING CAR MARKET ON LAMP DESIGN STILL HAVE CONTINUOUSLY NEW MODELING WHICH CAN FIT COORDINATE WITH CARRIAGE. THEY MAKE FRONT LAMP PERFORMANCE RAISING AND GIVING DRIVERS MORE ILLUMINATIVE CHOOSES EXCLUDING REGULATION. THEREFORE, DRIVING IN THE NIGHT THAT ILLUMINATES INTERFERENCE SITUATION MORE AND MORE WHICH LET SAFETY PROBLEMS INCREASING RELATIVELY. AND ROAD CONDITIONS IN OUR COUNTRY ARE NOT SAME WITH OUTSIDE OF COUNTRY. THERE ARE 73 PERCENTAGE ABOVE OF ROAD WITH 0NO MEDIAN STRIP AND ALSO ROAD NARROW WITH BAD CONDITION, MORE PEDESTRIANS AND ANIMALS. SO, GARISH LIGHT ILLUMINATING FROM FRONT LAMP WILL EFFECT ON THE OPPOSITE SIDE DRIVER'S RECOGNIZE OF VIEW THEN THE ACCIDENT MIGHT BE HAPPEN. ACCORDINGLY, THIS RESEARCH EXPECTATION TO EVALUATE FROM THE DESIGNER'S POINT OF VIEW. TO STUDYING VEHICLES FRONT LAMP ILLUMINATION AND DISTRIBUTION WHICH WILL EFFECT ON DRIVER'S VISION. STUDYING CONTENT INCLUDING: EFFECTING ON DRIVER'S RECOGNIZE BETWEEN LIGHT IRRADIATING FROM OPPOSITE SIDE OR NONE LIGHT IRRADIATING, DISTANCE OF TWO CARS DRIVE IN FRONT, DIFFERENT OF RECOGNIZABLE BETWEEN MALE AND FEMALE ETC. THIS RESEARCH IS TAKING ON REALLY CAR TESTING IN NIGHTTIME. BY TESTER SITTING INSIDE THE CAR AND UNDER DIFFERENT TESTING CONDITION TO SURVEY THAT RECOGNIZES DISTANCE OF DIFFERENCE FROM ILLUMINATING FROM OPPOSITE CAR LAMP AND NO CAR ILLUMINATIVE. IT WILL BE A POINTER OF CAR FRONT LAMP INTERFERE WITH ILLUMINATIVE THAT INFLUENCE ON DRIVER'S VISION. BY WAY OF THIS RESEARCH TO UNDERSTAND DOMESTIC DESIGN OF CAR FRONT LAMP PROPERLY AND ALSO TAKE THE GAUGE OF CNS REGULATION OF INSPECTION FOR CAR FRONT LAMP APPLICABILITY IN OUR COUNTRY.

Keywords : INDUSTRIAL DESIGN , DESIGN APPRAISAL , ERGONOMICS , PASSENGER CAR , HEADLAMP , CNS

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