

EUT: LCA 3.5 - GM FCC ID: NBG934692A FCC Title 47 CFR Part 15 C Date of issue: 2015-03-31



Annex acc. to FCC Title 47 CFR Part 15 relating to
Hella KGaA Hueck & Co.
LCA 3.5 - GM

# Annex no. 5 Functional Description

Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
Measurement Procedure: ANSI C63.4-2009

Date: 2015-03-13 Vers. no. 1.15

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**Functional Description of the test equipment (EUT)** 

# LCA 3.5 - GM – Lane Change Assistant

### **System Function and Purpose:**

The LCA is an advanced driver assistant system, to warn the driver of the subject vehicle against potential collisions with vehicles to the side and/or to the rear of the subject vehicle, and moving in the same direction as the subject vehicle during lane change manoeuvres. The system therefore detects vehicles to the rear and sides of the subject vehicle.

When the subject vehicle driver indicates the desire to make a lane change, the system will evaluate the situation and warn the driver if a lane change is not recommended. LCA is not meant to encourage aggressive driving. The absence of a warning will not guarantee that the driver can safely make a lane change manoeuvre. The system will not take any automatic action to prevent possible collisions. Responsibility for the safe operation of the vehicle remains with the driver.

#### **LCA System Architecture:**

The LCA consists of two radar sensor units which are mounted behind the rear bumper in the left and right rear corners of a car so that the rear and the sides of the car can be observed. One of the units is the main control unit "master" and the other is the "slave". The two units interchange data between each other via the sensor CAN-bus. The master interchanges data with other electronic control units of the vehicle via the vehicle CAN-bus. Both units incorporate an RF part and a DSP to preform the radar signal processing. Only the master incorporates a microprocessor which handles the communication to the vehicle CAN bus.

The warning lamps for the left and the right side are connected to the slave.

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FCC / IC / Japan Label:

LCA 3.5 - GM (MASTER)

LCA 3.5 - GM (SLAVE)





## **Declaration of Conformity for USA**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Usually this is followed by the following FCC caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment

Note: This equipment has been tested and found to comply with the limits digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may case harmful interferences to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

#### **Declaration of Conformity for CANADA**

Declaration of Conformity in English:

This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

Déclaration de conformité en français:

Cet appareil est conforme au CNR-310 d'Industrie Canada. Son exploitation est autorisée sous réserve que l'appareil ne cause pas de brouillage préjudiciable.

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