Hazard ID	Situational Analysis							Hazard Identification						Hazardous Event Classification						Determination of ASIL and Safety Goals	
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (optional)	Item Usage (function)	Situation Description	Function	Deviation	Deviation Details	Hazardous Event (resulting effect)	Event Details	Hazardous Event Description	Exposure (of situation)	Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)	Rationale (for controllability)	ASIL Determination	Safety Goal
HA-001	OM03 - Normal Driving	OS03 - Highway	EN06 - Rain (slippery road)	SD03 - High speed		IU01 - Correctly used	Normal driving on a highway with a wet slippery road at high speed and correctly used system.	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV04 - Actor effect is too much.	The LDW function applies an oscillating torque with very high torque (above limit).	EV00 - Collision with other vehicle.	High haptic feedback can affect driver's ability to steer as intended. The driver could lose control of the vehicle and collide with other vehicle or with road infrastructure.	Driver loses control of vehicle	E3 - Medium probability	Driving on a highway with a wet slippery road is normal,so we will label the exposure E3	S3 - Life-threatening or fatal injuries	The driver was traveling at a high speed	C3 - Difficult to control or uncontrollable	If the lane departure warning function causes the steering wheel to vibrate excessively with wild swings of the steering wheel, most drivers would have difficulty controlling the vehicle	C	The oscillating steering torque from the lane departure warning function shall be limited.
HA-002	OM03 - Normal Driving	OS02 - Country Road	EN01 - Normal conditions	SD03 - High speed		IU02 - Incorrectly used	Normal driving on country roads during normal conditions with high speed the driver is misusing the lane keeping assistance function as an autonomous function.	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03 - Function always activated	The LKA function is not limited in time duration which leads to misuse as an autonomous driving function	EV00 - Collision with other vehicle.	The driver misuse system as an autonomous driving function, and take both hands off the wheel. The driver could lose control of the vehicle and collide with another vehicle or with road infrastructure.	Driver loses control of vehicle	E2 - Low probability	The driver is on a country road and misusing the system. That combination probably does not happen often, so we will label the exposure E2	S3 - Life-threatening or fatal injuries	Because the driver is traveling at high speed, severity would be S3	C3 - Difficult to control or uncontrollable	The malfunction was that the lane keeping assistance was always on and had no time limit, so drivers could take both hands off the wheel. Because hands aren't on the wheel at high speeds, a vehicle accident would not be controllable	B	The lane keeping assistance function shall be time limited and the additional steering torque shall end after a given time interval so that the driver cannot misuse the system for autonomous driving.
HA-003	OM03 - Normal Driving	OS03 - Highway	EN02 - Sun blares (degraded view)	SD03 - High speed		IU01 - Correctly used	Normal driving on a highway with sun blares (degraded view) at high speed and correctly used system.	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV19 - Sensor detection is wrong	The LDW function is not able to detect lane lines with sun blares	EV00 - Collision with other vehicle.	The LDW camera fail to detect lane lines. The driver is not alerted with the depart warning, the vehicle may collide with another vehicle or with road infrastructure.	Driver loses control of vehicle	E3 - Medium probability	Driving on a highway with sun blares is normal,so we will label the exposure E3	S3 - Life-threatening or fatal injuries	Because the driver is traveling at high speed, severity would be S3	C0 - Controllable in general	Driving on the highway with good weahter, the driver is easy to control vehicle	QM	The the lane departure warning shall detect the lane lines wit sun blares
HA-004	OM03 - Normal Driving	OS03 - Highway	EN06 - Rain (slippery road)	SD03 - High speed		IU01 - Correctly used	Normal driving on a highway with a wet slippery road at high speed and correctly used system.	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV04 - Actor effect is too much.	The LKA function output a big torque on steering motor	EV03 - Car spins out of control	The LKA function output a big torque on steering motor and vehicle makes a sharp turning. The driver could lose control of the vehicle and collide with another vehicle or with road infrastructure.	Driver loses control of vehicle	E3 - Medium probability	Driving on a highway with a wet slippery road is normal,so we will label the exposure E3	S3 - Life-threatening or fatal injuries	Because the driver is traveling at high speed, severity would be S3	C3 - Difficult to control or uncontrollable	If the lane keeping assistance function causes the vehicle to make a sharp turning, most drivers would have difficulty controlling the vehicle	C	The additional steering torque output by the lane keeping assistance function shall be limited.