

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-19820-01-00 according to ISO/IEC 17025:2017

Period of validity: 11.08.2020 to 10.08.2025 Date of issue: 11.08.2020

Holder of certificate:

Hella Shanghai Electronics Co., Ltd.
No. 411, Jianye Road, Pudong New Area
Shanghai 201201, P. R. China

Tests in the fields:

Electromagnetic Compatibility (EMC), Environmental Testing, Dimensional Measurement, Functional Testing, Quality

Within the scope of accreditation marked with *), the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkks, to use standards or equivalent testing methods listed here with different issue dates.

Section	Standard / In house procedure / Version	Title of standard or in house procedure	Test area / Reductions
HSE-OSL5 EMC Center			
EMC	CISPR25:2016-10*	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers.	Restriction: 6.2 Conducted emissions from components/ modules – Voltage method

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EMC	CISPR25:2016-10*	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers.	Restriction: 6.4 Radiated emissions from components/ modules – ALSE method
EMC	ISO 7637-2:2011-03 *	Road vehicles – Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only	
EMC	ISO 7637-3:2016-07 *	Road vehicles – Electrical disturbances from conduction and coupling – Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines	
EMC	ISO 11452-2:2019-01 *	Road vehicles – Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 2: Absorber-lined shielded enclosure	
EMC	ISO 11452-4:2011-12 *	Road vehicles – Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 4: Harness excitation methods	Restriction: 6.1 Bulk Current Injection
EMC	ISO 10605:2008-07 *	Road vehicles – Test methods for electrical disturbances from electrostatic discharge	8. Component immunity test method (powered up test)
EMC	ISO 10605:2008-07 *	Road vehicles – Test methods for electrical disturbances from electrostatic discharge	9. Component packaging and handling test method (unpowered test)

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HSE-OSL1 Central Laboratories Environmental			
Environment Test	IEC 60068-2-1:2007-03 *	Environmental testing - Part 2-1: Tests - Test A: Cold	
Environment Test	IEC 60068-2-2:2007-07 *	Environmental testing - Part 2-2: Tests - Test B: Dry heat	
Environment Test	IEC 60068-2-14:2009-01*	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	Only Na, Nb
Environment Test	IEC 60068-2-30:2005-08*	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic	
Environment Test	IEC 60068-2-38:2009-01*	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	
Environment Test	IEC 60068-2-78:2012-01*	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	
Environment Test	IEC 60068-2-27:2008-02*	Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock	
Environment Test	IEC 60068-2-6:2007-12*	Environmental testing - Part 2-6: Tests – Test Fc: Vibration (sinusoidal)	
Environment Test	IEC 60068-2-64:2008-04*	Environmental testing – Part 2-64: Tests – Test Fh: Vibration, broadband random and guidance	
Environment Test	BMW GS 95024-3-1: 2019-08	Electrical and electronic components in motor vehicles Environmental requirements and testings	Only perform: M-01, M-04, M-05, M-06 K-01, K-02, K-03, K-05, K-06, K-07, K-08, K-09, K-14, K- 10(IPX0~IPX4K), K-16, K-11

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Environment Test	MBN LV124-2:2013-08	Electric and Electronic Components in Motor Vehicles up to 3,5t – General Requirements, Test Conditions and Tests Part 2: Environmental Requirements	Only perform: M-01, M-04, M-05, M-06 K-01, K-02, K-03, K-05, K-06, K-07, K-08, K-09, K-14, K- 10(IPX0~IPX4K), K-16, K-11
Environment Test	VW 80000:2017-10	Electric and Electronic Components in Motor Vehicles up to 3,5 t General Requirements, Test Conditions and Tests	Only perform: M-01, M-04, M-05, M-06 K-01, K-02, K-03, K-05, K-06, K-07, K-08, K-09, K-14, K- 10(IPX0~IPX4K), K-16, K-11
Environment Test	ISO 20653:2013-02 *	Road vehicles — Degrees of protection	Only perform: Execution of the tests for protection against ingress of water 8.4.2
Environment Test	ISO 9227:2017-03 *	Corrosion tests in artificial atmospheres — Salt spray tests	Only perform: NSS Test 5.2
Environment Test	IEC 60068-2-11:1999- 12*	Basic environmental testing procedures Part 2: Tests Test Ka: Salt mist	

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HSE-OSL2 Central Laboratories Metrology			
Dimensional Measurement	AD-00510:2019-02	Determining dimensional variations and form errors in industrially manufactured products using tactile 3D CMM	
Dimensional Measurement	AD-00511: 2019-02	Monitoring the precision of the CMM using calibrated CMM check specimens	
Dimensional Measurement	SW-21508_HSE_SHAN: 2019-05	Determining dimensional variations and form errors in industrially manufactured products using Optical 3D Scanner	
Dimensional Measurement	SW-21509_HSE_SHAN: 2019-05	Determining dimensional variations and form errors in industrially manufactured products using Optical 3D CMM	
HSE-C-T1 Testing Components Shanghai			
Functional Test	FMVSS 49 CFR 571.124: 2018-10	Federal Motor Vehicle Safety Standards Part 571 No.124 Accelerator control systems	
HSE-QLAB Quality Laboratory			
Quality	AD-00184: 2018-5-24	Microstructure analysis Printed circuit board microsection preparation	Cross section
Quality	10000031900_001_05 : 2019-04	General Test Instruction for APS Pedal 5.7.7 Return response time measurement 5.8.1 Function test 5.8.2 Run-in/Wear-in test 5.8.9 Measuring of contact resistance	

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Quality	AD-00547:2019-03	Laboratory haptic measurements	
Quality	AK4.14 AG7:2010-03	German OEM AK4.14 AG7- Qualification Requirement Specifications-Battery Sensor (IBS)	