

Name: DEKRA Testing and Certification (Shanghai) Ltd.

Address: Building 1, No.1050, Xingxian Road, Jiading District, Shanghai, China

Registration No. CNAS L5776

Accreditation Criteria: ISO/IEC 17025 and relevant requirements of CNAS

Effective Date: 2018-08-19 Expiry Date: 2024-08-18

SCHEDULE 3 ACCREDITED TESTING SCOPE

№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
未分组					
1	Vehicle interior/exterior materials and parts	1	Odor	Determination of the odour characteristics of trim materials in motor vehicles VDA 270:2016	
		2	Organic Emissions-Thermal Desorption Method	Thermal Desorption Analysis of Organic Emissions for the Characterization of Non-Metallic Materials for Automobiles VDA 278:2011	
		3	Fogging Characteristics	Determination of the fogging characteristics of trim materials in the interior of automobiles DIN 75201:2011	
		4	Organic Emissions-1 m3 Test Chamber Method	Determination of Organic Substances as Emitted from Automotive Interior Products Using a 1 m3 Test Chamber VDA 276:2005	
		5	Organic Emissions-Bag Method	Interior air of road vehicles —Part 2:Screening method for the determination of the emissions of volatile organic compounds from vehicle interior parts and materials-Bag method ISO 12219-2: 2012	
		6	Organic Emissions-Small Chamber Method	Interior air of road vehicles —Part 4: Method for the determination of the emissions of volatile organic compounds from vehicle interior parts and materials- Small chamber method ISO 12219-4:2013	

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		7	Colorfastness to Crocking	Colorfastness to Crocking: AATCC Crockmeter Method AATCC 8:2016	
		8	Colour fastness to rubbing	Textiles - Tests for colour fastness - Part X12: Colour fastness to rubbing ISO 105-X12:2016	
		9	Tensile Properties	Plastics--Determination of tensile properties--Part 1:General principles GB/T 1040.1-2006	
				Plastics. Determination of tensile properties.Part 1: General principles ISO 527-1: 2012	
				Plastics--Determination of tensile properties--Part 2:Test conditions for moulding and extrusion plastics GB/T 1040.2-2006	
				Plastics. Determination of tensile properties —Part 2: Test conditions for moulding and extrusion plastics ISO 527-2:2012	
				Plastics--Determination of tensile properties--Part 3:Test conditions for films and sheets GB/T 1040.3-2006	
				Plastics -- Determination of tensile properties -- Part 3: Test conditions for films and sheets ISO 527-3-1995	
				Plastics--Determination of tensile protperties--Part 4:Test conditions for isotropic and orthotropic fibre-reinforced plastic composites GB/T 1040.4-2006	
				PLastics - Determination of Tensile Properties - Part 4: Test Conditions for Isotropic and Orthotropic Fibre-Reinforced Plastic Composites ISO 527-4: 1997	
				Plastics--Determination of tensile properties--Part 5:Test conditions for unidirectional fibre-reinforced plastic composites GB/T 1040.5-2008	
		Plastics — Determination of tensile properties — Part 5: Test conditions for unidirectional fibre-reinforced plastic composites ISO 527-5: 2009			
		10	Flexural Properties	Plastics--Determination of flexural properties GB/T 9341-2008	
				Plastics. Determination of flexural properties ISO 178:2010/Amd 1:2013	



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		11	Charpy Impact	Plastics--Determination of charpy impact properties--Part 1:Non-instrumented impact test GB/T 1043.1-2008	
				Plastics. Determination of charpy impact properties. Part 1:Non-instrumented impact test ISO 179-1:2010	
		12	Izod Impact	Plastics-Determination of Izod impact strength GB/T 1843-2008	
				Plastics. Determination of Izod impact strength ISO 180:2000/Amd1:2006/Amd2:2013	
		13	PunctureImpact	Plastics.Determination of punctureimpact behaviour of rigid plastics.Part 2: Instrumented impact testing ISO 6603-2:2000	
		14	Cyclic Corrosion	Paints and varnishes .Determination of resistance to cyclic corrosion conditions.Part 1:Wet (salt fog)/dry/humidity ISO 11997-1:2017	Accredited only for AnnexD:C cycle B
		15	Xenon-arc lamps exposure	Plastics -- Methods of exposure to laboratory light sources -- Part 2: Xenon-arc lamps ISO 4892-2:2013	
				Textiles - Tests for colour fastness - Part B06: Colour fastness and ageing to artificial light at high temperatures: Xenon arc fading lamp test ISO 105-B06 AMD.1-2002	
				Accelerated Exposure of Automotive Interior Trim Components Using a Controlled Irradiance Xenon Arc Apparatus SAE J2412:2015	
				Performance Based Standard for Accelerated Exposure of Automotive Exterior Material Using a Controlled Irradiance Xenon-Arc Apparatus SAE J2527:2017	
		16	Density	Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method GB/T 1033.1-2008	Accredited only for:immers ion method
				Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method ISO1183-	Accredited only



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				1:2012	for:immersion method
		17	Ash	Plastics--Determination of ash--Part 1:General methods GB/T 9345.1-2008	Accredited only for: Method A
				Plastics — Determination of ash — Part 1: General methods ISO 3451-1:2008	Accredited only for: Method A
		18	Resistance to environmental stress cracking (ESC)	Plastics Determination of resistance to environmental stress cracking (ESC) Part 3: Bent strip method ISO 22088-3:2006	
		19	Grey scale	Textiles -- Tests for colour fastness -- Part A02: Grey scale for assessing change in colour ISO 105-A02:1993	
				Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour (ISO 105-A02:1993); German version EN 20105-A02:1994 DIN EN 20105-A02:1994	
		20	Tests at constant temperature	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.1	Accredited only for: Volume≤(100x920x95)mm; Temperature range:(-40~120)°C
		21	Temperature step test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.2	Accredited only for: Volume≤(100x920x95)mm;

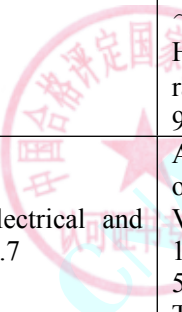


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					Temperature range:(-40~120)°C
		22	Salt spray tests	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.5	Accredited only for: Neutral Salt Spray test, Volume≤(2160*980*1320)mm
		23	Humid heat, cyclic test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.6	Accredited only for: Volume≤(1100x920x950)mm; Temperature range:(10~90)°C; Humidity range:(5~95)%RH
		24	Damp heat, steady-state test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.7	Accredited only for: Volume≤(1100x920x950)mm; Temperature

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					re range:(10 ~90)°C; Humidity range:(5~ 95)%RH
		25	Accelerated ageing tests	Flexible and rigid cellular polymeric materials - Accelerated ageing tests DIN EN ISO 2440:2015	Accredited only for: dry ageing
				Flexible and rigid cellular polymeric materials - Accelerated ageing tests GB/T 9640-2008	Accredited only for: dry ageing
		26	Uniform changes in appearance	Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 1: General introduction and designation system ISO 4628-1:2016	
		27	Assessment of degree of blistering	Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 2: Assessment of degree of blistering ISO 4628-2:2016	
		28	Assessment of degree of rusting	Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 3: Assessment of degree of rusting ISO 4628-3:2016	
		29	Cross-cut test	Paints and varnishes - Cross-cut test ISO 2409:2013	
2	Automotive Components	1	Electrostatic discharge	Road vehicles — Test methods forelectrical disturbances from electrostatic discharge GB/T 19951-2005	
				Electromagnetic Compatibility Measurement Procedure for Vehicle Components — Part 13: Immunity to Electrostatic Discharge SAE J1113-13:2015	
				Road vehicles — Test methods forelectrical disturbances from electrostatic discharge ISO 10605:2008	



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		2	Radiated Emissions	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers GB/T 18655-2010 6.4	
				Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers CISPR 25:2016 6.5	
				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 7 Annex8	
				Electromagnetic compatibility(EMC)— Product family standard for aftermarket electronic equipment in vehicle EN 50498: 2010 7.1 7.2	
				Limits and Methods of Measurement of Radio Disturbance Characteristics of Components and Modules for the Protection of Receivers Used On Board Vehicles SAE J1113-41:2006 7	
		3	Conducted Emissions-Voltage Method	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers GB/T 18655-2010 6.2	
				Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers CISPR 25:2016 6.3	
		4	Conducted Emissions-Current Method	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers GB/T 18655-2010 6.3	
				Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers CISPR 25:2016 6.4	
		5	Conducted Transient Emissions	Road Vehicles-Electrical disturbances from conduction and coupling- Part 2: Electrical transient conduction along supply lines only GB/T21437.2-2008 4.3	
				Road Vehicles-Electrical disturbances from conduction and coupling- Part 2: Electrical transient conduction along supply lines only ISO 7637-2:2011 4.3	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
				Electromagnetic Compatibility - Component Test Procedure - Part 42 - Conducted Transient Emissions SAE J1113-42: 2010	
				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 10	
				Electromagnetic compatibility(EMC)— Product family standard for aftermarket electronic equipment in vehicle EN 50498: 2010 7.3	
		6	Conducted Transient Immunity	Road Vehicles-Electrical disturbances from conduction and coupling- Part 2: Electrical transient conduction along supply lines only GB/T 21437.2-2008 4.4	
				Road Vehicles-Electrical disturbances from conduction and coupling- Part 2: Electrical transient conduction along supply lines only ISO 7637.2:2011 4.4	
				Road Vehicles-Electrical disturbances from conduction and coupling - Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines GB/T 21437.3-2012	
				Road Vehicles-Electrical disturbances from conduction and coupling - Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines ISO 7637.3:2016	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment Part 2:Electrical loads GB/T28046.2-2011	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment Part 2:Electrical loads ISO16750-2:2012	
				Immunity to conducted Transients on Power Leads SAE J1113-11:2012	
				Electrical Interference by Conduction and Coupling - Capacitive Coupling via Lines Other than Supply Lines SAE J1113-12:2006	
				Electromagnetic compatibility(EMC)— Product family standard for aftermarket electronic equipment in vehicle EN 50498:2010 7.4	
				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 10	



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		7	Absorber Lined Shielded Enclosure (ALSE) RF Immunity	Limits and Methods of Measurement Procedure of Electromagnetic Radiated Immunity of Components and Modules for On-Board Vehicles GB/T 17619-1998	
				Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 2: Absorber-lined shielded enclosure ISO 11452-2:2004	
				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 9 Appendix 3	
				Electromagnetic Compatibility Measurement Procedure for Vehicle Components - Part 21: Immunity to Electromagnetic Fields, 30MHz to 18GHz, Absorber-Lined Chamber SAE J1113-21:2013	
		8	TEM Cell RF Immunity	Limits and Methods of Measurement Procedure of Electromagnetic Radiated Immunity of Components and Modules for On-Board Vehicles GB/T 17619-1998	
				Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 3: Transverse Electromagnetic (TEM) Cell ISO 11452-3:2016	
				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 9 Appendix 2	
				Immunity to Radiated Electromagnetic Field; 10kHz to 200MHz - Crawford TEM Cell and 10kHz to 5GHz - Wideband TEM Cell SAE J1113-24:2010	
		9	Bulk current Injection RF Immunity	Limits and Methods of Measurement Procedure of Electromagnetic Radiated Immunity of Components and Modules for On-Board Vehicles GB/T 17619-1998	
				Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 4: Harness Excitation methods ISO 11452-4:2011	专用章



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№	Test Object	Item/Parameter		Standard or Method	Note	
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				Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 9 Appendix 4		
				Immunity to Radiated Electromagnetic Fields - Bulk Current Injection (BCI) Method SAE J1113-4:2014		
		10	Stripline RF Immunity		Limits and Methods of Measurement Procedure of Electromagnetic Radiated Immunity of Components and Modules for On-Board Vehicles GB/T 17619-1998	
					Road vehicles — Component testmethods for electrical disturbances from narrowband radiated electromagnetic energy — Part 5: Stripline ISO 11452-5:2002	
					Regulation No. 10 Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility ECE R10.05 Annex 9	
					Electromagnetic Compatibility Measurement Procedure for Vehicle Components - Immunity to Radiated Electromagnetic Fields, 10kHz to 200MHz, Strip Line Method SAE J1113-23:1995	
					Road vehicles — Component testmethods for electrical disturbances from narrowband radiated electromagnetic energy — Part 8:Immunity to Magnetic Field ISO 11452-8:2015	
					Electromagnetic Compatibility Measurement Procedure for Vehicle Components - Part 22 - Immunity to Radiated Magnetic Fields SAE J1113-22:2010	
		11	Immunity to Magnetic Field		Road vehicles — Component testmethods for electrical disturbances from narrowband radiated electromagnetic energy — Part 8:Immunity to Magnetic Field ISO 11452-8:2015	
					Electromagnetic Compatibility Measurement Procedure for Vehicle Components - Part 22 - Immunity to Radiated Magnetic Fields SAE J1113-22:2010	
		12	Immunity to Portable Transmitters		Road vehicles — Component testmethods for electrical disturbances from narrowband radiated electromagnetic energy — Part 9:Immunity to Portable Transmitters ISO 11452-9: 2012	
3	Electric vehicle conductive charging system		All Items	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017		
		1	Functions provided in Mode 2, 3 and 4	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 6.3		



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		2	Protection against electric shock	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 8	
		3	Strain relief	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 11.6	
		4	Clearances and creepage distances	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.3	
		5	IP degrees	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.4	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibeih Hi-Tech Park, Jing'an District, Shanghai, P.R.China
		6	Insulation resistance	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.5	
		7	Touch current	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.6	
		8	Dielectric withstand	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.7	
		9	Temperature rise	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.8	Accredited only for

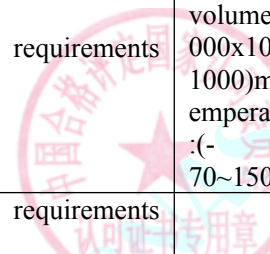


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					volume≤(750x800x750)mm;temperature:(-70~150)°C;humidity:(10~98%)RH
		10	Damp heat functional test	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.9	Accredited only for volume≤(750x800x750)mm;temperature:(-70~150)°C;humidity:(10~98%)RH
		11	Minimum temperature functional test	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.10	Accredited only for volume≤(1000x1000x1000)mm;temperature:(-70~150)°C
		12	Mechanical strength	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 12.11	
		13	Marking and instructions	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 16	

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		14	Control pilot function through a control pilot circuit using a PWM signal and a control pilot wire	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2017 Annex A	
4	Electric vehicle conductive charging system		All Items	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011	
		1	Functions provided in each mode of charging for modes 2, 3, and 4	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 6.4	
		2	Protection against electric shock	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 7	
		3	IP degrees for basic and universal interfaces	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.3	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibei Hi-Tech Park, Jing'an District, Shanghai, P.R.China
		4	Dielectric withstand	Electric vehicle conductive charging system –Part 1: general requirements	



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			characteristics	IEC 61851-1:2010,EN 61851-1:2011 11.4			
		5	Insulation resistance	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.5			
		6	Clearances and creepage distances	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.6			
		7	Leakage – touch current	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.7			
		8	Environmental tests	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.8			
		9	Permissible surface temperature	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.9			
		10	Mechanical environmental tests	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.11			
		11	Legibility	Electric vehicle conductive charging system –Part 1: general requirements IEC 61851-1:2010,EN 61851-1:2011 11.15.2			
		5	Electric vehicle conductive charging system		All Items	Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-21:2001,EN 61851-21:2002	
				1	Earthing connection and electric vehicle continuity	Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-21:2001,EN 61851-21:2002 7.2	
				2	Dielectric withstand characteristics	Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-21:2001,EN 61851-21:2002 8.1	
3	Touch current			Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-21:2001,EN 61851-21:2002 8.2			
4	Creepage distances and clearances			Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-			



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				21:2001,EN 61851-21:2002 8.4	
		5	Legibility	Electric vehicle conductive charging system —Part 21: Electric vehicle requirements for conductive connection to an a.c/d.c. Supply IEC 61851-21:2001,EN 61851-21:2002 12.2	
6	AC electric vehicle charging station		All Items	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002	
		1	Control functions	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 8.1	
		2	Permissible surface temperature	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 8.3	
		3	Charging station protection degree (IP)	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 8.4	
		4	Earthing electrode and continuity	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 9.2	
		5	Dielectric withstand characteristics	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 10.1	
		6	touch current	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 10.2	
		7	Creepage distances and clearances	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 10.4	
		8	Climatic environmental tests	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 11.1	Accredited only for volume≤(750x800x750)mm;temperature:(-70~150)°C; humidity:(10~98%)R



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		9	Mechanical environmental tests	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 11.2	
		10	Legibility	Electric vehicle conductive charging system —Part 22: AC electric vehicle charging station IEC 61851-22:2001,EN 61851-22:2002 14.2	
7	DC electric vehicle charging station		All Items	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016	
		1	Functions provided in d.c. charging	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 6.4	
		2	Protection against electric shock	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 7	
		3	Breaking capacity	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 9.4	
		4	Dielectric withstand characteristics	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 11.4	
		5	Insulation resistance	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 11.5	
		6	Clearances and creepage distances	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 11.6	
		7	Leakage – touch current	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 11.7	



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		8	IP degrees for ingress of objects	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.1.2	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibe Hi-Tech Park, Jing’an District, Shanghai, P.R.China
		9	Stability	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.1.4	
		10	Rated outputs and maximum output power	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.1	
		11	Output voltage and current tolerance	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.2	
		12	Control delay of charging current in CCC	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.3	
		13	Descending rate of charging current	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN	

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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
				61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.4	
		14	Periodic and random deviation (current ripple)	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.5	
		15	Periodic and random deviation (voltage ripple in CVC)	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.6	
		16	Load dump	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.1.7	
		17	Effective earth continuity between the enclosure and the external protectivecircuit	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 101.2.2	
		18	Communication between EV and d.c. EV charging station	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 102	
		19	DC EV charging station of system A	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 Annex AA	
		20	DC EV charging station of system B	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 Annex BB	
		21	DC EV charging station of system C(Combined charging system)	Electric vehicle conductive charging system –Part 23: DC electric vehicle charging station IEC 61851-23:2014,IEC 61851-23:2014/COR1:2016,EN 61851-23:2014,EN 61851-23:2014/AC:2016 Annex CC	
8	Electric vehicle		All Items	Electric vehicle conductive charging system - Part 24: Digital communication	



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		№	Item/ Parameter		
	conductive charging system			between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015	
1		EVSE-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex A		
2		EV-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex A		
3		EVSE-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex A		
4		EV-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex A		
5		EVSE-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex B		
6		EV-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex B		
7		EVSE-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-		



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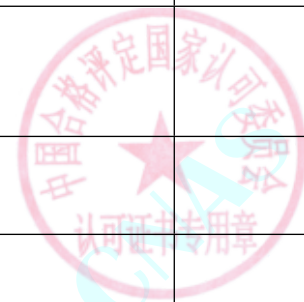
№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
				24:2014,EN 61851-24:2014/AC:2015 Annex B	
		8	EV-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex B	
		9	EVSE-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	
		10	EV-Protocols	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	
		11	EVSE-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	
		12	EV-Physical- and Data-Link-Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	
		13	EVSE-Protocols & Physical- and Data-Link Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	
		14	EV-Protocols & Physical- and Data-Link Layer	Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging IEC 61851-24:2014,IEC 61851-24:2014/COR1:2015,EN 61851-24:2014,EN 61851-24:2014/AC:2015 Annex C	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
9	Electric vehicle charging system		All Items	Electric vehicle charging system TR 25:2016	
		1	Modes of EV charging and control pilot fuction	Electric vehicle charging system TR 25:2016 1.6	
		2	Protection against eelectric shock	Electric vehicle charging system TR 25:2016-1.7	
		3	Connection between the power supply and the EV	Electric vehicle charging system TR 25:2016 1.8	
		4	Specific requirements for vehicle inlet, connector, plug and socket-outlet	Electric vehicle charging system TR 25:2016 1.9	
		5	Charging cable assembly requirements	Electric vehicle charging system TR 25:2016 1.10	
		6	EV supply equipments requirements	Electric vehicle charging system TR 25:2016 1.11	
		7	installation requirements for EV public charging station	Electric vehicle charging system TR 25:2016 1.12	
		8	General system rquirement and interface	Electric vehicle charging system TR 25:2016 2.6	
9	Specific requirements for d.c. EV charging station	Electric vehicle charging system TR 25:2016 2.12			



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		№	Item/ Parameter		
		10	Communication between EV and d.c. EV charging station	Electric vehicle charging system TR 25:2016 2.13	
		11	Annexes to Section One	Electric vehicle charging system TR 25:2016 附录 1	
		12	Annexes to Section Two	Electric vehicle charging system TR 25:2016 附录 2	
10	Electric vehicle conductive charging system		All Items	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015	
		1	Functions provided in Mode 2, 3 and 4	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 5.2	
		2	Protection against electric shock	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 7	
		3	Breaking capacity	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 9.3	
		4	Clearances and creepage distances	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 10.4	
		5	IP degrees	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 10.5	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibe Hi-Tech Park, Jing'an



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					District, Shanghai, P.R.China
		6	Touch current	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 11.2	
		7	Insulation resistance	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 11.3	
		8	Dielectric withstand	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 11.4	
		9	Impulse voltage generator	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 11.5	
		10	Temperature rise	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 11.6	
		11	service conditions	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 14	
		12	Marking and instructions	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 16	
		13	AC control pilot circuit and Control pilot function	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 Annex A	
		14	DC control pilot circuit and Control pilot function	Electric vehicle conductive charging system - Part 1: General requirements GB/T 18487.1-2015 Annex B	
11	Electric vehicle conductive charging system		All Items	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001	
		1	Earthing connection and electric vehicle continuity	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001 7.2	



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		№	Item/ Parameter		
		2	Dielectric withstand characteristics	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001 8.1	
		3	Touch current	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001 8.2	
		4	Creepage distances and clearances	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001 8.4	
		5	Legibility	Electric vehicle conductive charging system - Electric vehicles requirements for conductive connection to an A.C/D.C. Supply GB/T 18487.2-2001 12.2	
12	A.C/D.C. Electric vehicles charging station		All Items	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001	
		1	Control functions	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 8.1	
		2	Permissible surface temperature	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 8.4	
		3	Charging station protection degree (IP)	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 8.5	
		4	DC Voltage/ Current Output	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 8.10	
		5	Earthing electrode and continuity	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 9.2	
		6	Dielectric withstand characteristics	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 10.1	
		7	touch current	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 10.2	
		8	Creepage distances and clearances	Electric vehicle conductive charging system - A.C/D.C. Electric vehicles charging station GB/T 18487.3-2001 10.4	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		9	Climatic environmental tests	Electric vehicle conductive charging system - A.C/D.C. vehicles charging station GB/T 18487.3-2001 11.1	Accredited only for volume≤(2000x2400x2000)mm;t emperature :(-40~120)°C; humidity:(20~98%)RH
		10	Mechanical environmental tests	Electric vehicle conductive charging system - A.C/D.C. vehicles charging station GB/T 18487.3-2001 11.2	
		11	Legibility	Electric vehicle conductive charging system - A.C/D.C. vehicles charging station GB/T 18487.3-2001 15.2	
13	Electric vehicle conductive charging system-Supply equipment		All Items	Interoperability test specifications of electric vehicle conductive charging-Part 1: Supply equipment GB/T 34657.1-2017	
		1	charging interface interoperability test	Interoperability test specifications of electric vehicle conductive charging-Part 1: Supply equipment GB/T 34657.1-2017 6.2	
		2	DC charging operability test	Interoperability test specifications of electric vehicle conductive charging-Part 1: Supply equipment GB/T 34657.1-2017 6.3	
		3	AC charging operability test	Interoperability test specifications of electric vehicle conductive charging-Part 1: Supply equipment GB/T 34657.1-2017 6.4	
14	Electric vehicle conductive charging system-Vehicle		All Items	Interoperability test specifications of electric vehicle conductive charging-Part 2: Vehicle GB/T 34657.2-2017	
		1	Inlet space dimension check	Interoperability test specifications of electric vehicle conductive charging-Part 2: Vehicle GB/T 34657.2-2017 6.1	
		2	DC charging operability test	Interoperability test specifications of electric vehicle conductive charging-Part 2: Vehicle GB/T 34657.2-2017 6.2	



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
		3	AC charging operability test	Interoperability test specifications of electric vehicle conductive charging-Part 2: Vehicle GB/T 34657.2-2017 6.3	
15	On-board conductive charger for electric vehicle		All Items	On-board conductive charger for electric vehicle QC/T 895-2011	
		1	Environment test	On-board conductive charger for electric vehicle QC/T 895-2011 7.2	
		2	Input voltage and frequency test	On-board conductive charger for electric vehicle QC/T 895-2011 7.3	
		3	Functional requirements test	On-board conductive charger for electric vehicle QC/T 895-2011 7.4	
		4	High voltage electric characteristic tests	On-board conductive charger for electric vehicle QC/T 895-2011 7.5	
		5	Dielectric withstand characteristics	On-board conductive charger for electric vehicle QC/T 895-2011 7.6	
		6	vibration test	On-board conductive charger for electric vehicle QC/T 895-2011 7.8.1	
		7	shock test	On-board conductive charger for electric vehicle QC/T 895-2011 7.8.2	
		8	Chemical agent withstand tests	On-board conductive charger for electric vehicle QC/T 895-2011 7.8.3	
		9	IP degree test	On-board conductive charger for electric vehicle QC/T 895-2011 7.8.3	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibe Hi-

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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					Tech Park, Jing'an District, Shanghai, P.R.China
		10	Noise test	On-board conductive charger for electric vehicle QC/T 895-2011 7.8.4	
		11	Endurance test	On-board conductive charger for electric vehicle QC/T 895-2011 7.9	
16	Electric and electronic products	1	cold	Environmental testing for electric and electronic products--Part 2:Test methods--Tests A: Cold GB/T 2423.1-2008	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 70~150)°C
				Environmental testing Part 2-1: Tests Test A: Cold IEC 60068-2-1:2007	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 70~150)°C
		2	dry heat	Environmental testing for electric and electronic products--Part 2:Test methods--Tests B:Dry heat GB/T 2423.2-2008	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					:(max.200 °C)
				Environmental testing Part 2.2: Tests Tests B: Dry heat IEC 60068-2-2:2007	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(max.200 °C)
		3	damp heat, steady state	Environmental testing for electric and electronic products--Part 2:Testing method--Test Cab:Damp heat,steady state GB/T 2423.3-2016	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 40~150)°C; humidity:(25~98%)RH
				Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state IEC 60068-2-78:2012	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 40~150)°C; humidity:(



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					25~98%)RH
		4	damp heat,cyclic	Environmental testing for electric and electronic products--Part 2:Test method--Test Db:Damp heat,cyclic (12h+12h cycle) GB/T 2423.4-2008	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
				Environmental testing Part 2-30: Tests Test Db: Damp heat, cyclic (12 h + 12 h cycle) IEC 60068-2-30:2005	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		5	Composite temperature/humidity cyclic test	Environmental testing - Part 2: Test methods - Test Z/AD: Composite temperature/humidity cyclic test GB/T 2423.34-2012	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-

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		№	Item/ Parameter		
					40~150)°C; humidity:(25~98%)R H
				Environmental testing Part 2-38: Tests Test Z/AD: Composite temperature/humidity cyclic test IEC 60068-2-38:2009	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 40~150)°C; humidity:(25~98%)R H
		6	Change of temperature	Environmental testing - Part 2: Tests methods - Test N: Change of temperature GB/T 2423.22-2012	Accredited only for volume≤(9 70x460x67 0)mm;tem perature:(- 65~200)°C
				Environmental testing Part 2-14: Tests Test N: Change of temperature IEC 60068-2-14:2009	Accredited only for volume≤(9 70x460x67 0)mm;tem perature:(- 65~200)°C
		7	The free falling	Electric and electronic products--Basic environmental test regulations for	The test is

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		№	Item/ Parameter		
			method	electricians--Test Ed: The free falling method GB/T 2423.8-1995	carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibe Hi-Tech Park, Jing'an District, Shanghai, P.R.China
17	Road vehicles - electrical and electronic equipment	1	General	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 1: General GB/T 28046.1-2011	
		2	General	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 1: General ISO 16750-1:2006	
18	Road vehicles - electrical and electronic equipment		All Items	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011,ISO 16750-2:2012	
		1	Direct current supply voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.2	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.2	
		2	Overvoltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.3	
Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.3					

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		№	Item/ Parameter		
		3	Superimposed alternating voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.4	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.4	
		4	Slow decrease and increase of supply voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.5	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.5	
		5	Discontinuities in supply voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.6	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.6	
		6	Reversed voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.7	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.7	
		7	Ground reference and supply offset	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.8	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.8	
		8	Open circuit tests	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.9	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.9	
		9	Short circuit protection	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.10	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.10	
10	Withstand voltage	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.11			



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.11	
		11	Insulation resistance	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads GB/T 28046.2-2011 4.12	
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads ISO 16750-2:2012 4.12	
19	Road vehicles - electrical and electronic equipment		All Items	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011,ISO 16750-4:2010	
		1	Tests at constant temperature	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 5.1	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.1	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					H
		2	Temperature step test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 5.2	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 40~150)°C; humidity:(25~98%)R H
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.2	Accredited only for volume≤(1 000x1000x 1000)mm;t emperature :(- 40~150)°C; humidity:(25~98%)R H
		3	Temperature cycling tests	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 5.3	Accredited only for volume≤(9 70x460x67 0)mm;tem perature:(- 65~200)°C

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				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.3	Accredited only for volume≤(970x460x670)mm;temperature:(-65~200)°C
		4	Humid heat, cyclic test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 5.6	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.6	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH
		5	Damp heat, steady-	Road vehicles - Environmental conditions and testing for electrical and	Accredited

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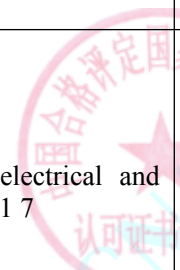
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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
			state test	electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 5.7	only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
				Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.7	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		6	Dust and water protection	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads GB/T 28046.4-2011 7	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park

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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					Shibei Hi-Tech Park, Jing'an District, Shanghai, P.R.China
		7	Dust test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO 16750-4:2010 5.10	The test is carried out in No.250, Jiangchang san Road, Building 16 Headquarter Economy Park Shibei Hi-Tech Park, Jing'an District, Shanghai, P.R.China
20	Road vehicles - electrical and electronic equipment	1	Chemical loads	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 5: Chemical loads GB/T 28046.5-2013	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					25~98%)RH
					Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH
21	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles	1	General	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —Part 1:General ISO 19453-1:2018	
22	Road vehicles — Environmental conditions and testing for		All Items	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —Part 4:Climatic loads ISO19453-4:2018	
		1	Tests at constant temperature	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —Part	Accredited only for



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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
	electrical and electronic equipment for drive system of electric propulsion vehicles			4:Climatic loads ISO19453-4:2018 5.1	volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		2	Temperature step test	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —Part 4:Climatic loads ISO19453-4:2018 5.2	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		3	Temperature cycling tests	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles —Part 4:Climatic loads ISO19453-4:2018 5.3	Accredited only for volume≤(970x460x670)mm;temperature:(-65~200)°C
		4	Humid heat, cyclic test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO19453-4:2018 5.6	Accredited only for volume≤(1

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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		5	Damp heat, steady-state test	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO19453-4:2018 5.7	Accredited only for volume≤(1000x1000x1000)mm;t temperature :(-40~150)°C; humidity:(25~98%)RH
		6	Dust and water protection	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads ISO19453-4:2018 5.10	The test is carried out in No.250, Jiangchangsan Road, Building 16 Headquarter Economy Park Shibe Hi-Tech Park,

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№	Test Object	Item/Parameter		Standard or Method	Note
		№	Item/ Parameter		
					Jing'an District, Shanghai, P.R.China
23	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles	1	Chemical loads	Road vehicles — Environmental conditions and testing for electrical and electronic equipment for drive system of electric propulsion vehicles - Part 5: Chemical loads ISO19453-5:2018	Accredited only for volume≤(1000x1000x1000)mm;t emperature :(-40~150)°C; humidity:(25~98%)RH



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