



**List of main tests possibilities – EMC Laboratory**

General Standard	Test name	Test description
ISO 7637-2	Pulse 1, 2a, 2b, 3a, 3b	Power supply line
ISO 7637-3	Pulse 1, 2a, 2b, 3a, 3b	I/O line
ISO 10605	ESD Immunity	up to 30kV
ISO 11452-4	Bulk Current Injection test method (9kHz-400MHz)	up to 350mA
ISO 11452-8	Immunity to magnetic field	10Hz -150 kHz
ISO 16750-2	Power supply voltage variations	§4.2 to §4.10

Car manufacturer standard	Test name	Test description
<b>FORD EMC-CS-2009 &amp; FMC 1278 &amp; JLR-EMC-CS-2010</b>	Bulk Current Injection	RI 112
	Coupled Immunity	RI 130
	Magnetic Field Immunity	RI 140
	Coupled Immunity	RI 150
	Immunity from Continuous Power Line Disturbance	CI 210
	Immunity from Transient Disturbances	CI 220
	Immunity to GroundVoltage Offse	CI 250
	Immunity to Voltage Dropout	CI 260
	Waveform A, B, C, D	CI 265
Electrostatic Discharge	CI 280	



Car manufacturer standard	Test name	Test description
<b>PSA B21 7110</b>	Resistance to usual power supply voltages	TE 01
	Resistance to exceptional supply voltage	TE 07
	Resistance to the voltage variations within the usual "volt control" range	TE 08
	Resistance to slow increase and decrease of supply voltage	TE 02
	Reinitialization test	TE 03
	Resistance to unusual power supply voltages	TE 04
	Resistance to ground and positive supply voltages short circuit	TE 05
	Resistance to long duration overloads	TE 06
	Resistance to pulses 1 and 2A	IC 01
	Resistance to 3a and 3b pulses	IC 02
	Resistance to 5b pulses	IC 03
	Resistance to supply micro-interruptions	IC 04
	Resistance to pulses 4 or 4BIS	IC 05
	Resistance to re-start pulse	IC 12
	Resistance to the "volt control" voltage pulse	IC 13
	Resistance to voltage ripples	IC 06
	Immunity to transients on the signal lines	IC 07
	Immunity to transients with wire to wire coupling	IC 07 bis
	Immunity to bulk current injection (BCI)	IC 08
	Immunity to bulk current injection (DBCI)	IC 08 bis
Immunity to low frequency magnetic field	IR 02	
Resistance to electrostatic discharges, equipment not connected	IR 03	
Resistance to electrostatic discharges, equipment switched on	IR 04	



Car manufacturer standard	Test name	Test description
FCA CS.00054	Supply Voltage Range	§5.2.1
	Ignition Off Draw (IOD)	§5.2.2
	Supply Voltage Ripple (Superimposed Alternating Voltage)	§5.2.3
	Sneak Path	§5.3.1
	Supply Voltage Drop Out	§5.3.2
	Power Supply disconnection	§5.3.3
	Reset Behavior at Voltage Drop	§5.3.4
	Supply Voltage Dips	§5.3.5
	Engine Cranking Low Voltage – Resembling Cold Cranking	§5.3.6
	Engine Cranking Low Voltage – Warm cranking / Stop – Start	§5.3.7
	Slow Increase and Decrease of Supply Voltage	§5.3.8
	Supply Over Voltage and Reverse Voltage	§5.4
	Immunity to Short Circuits in the Supply Voltage Input and Load Output Lines	§5.5.1
	Immunity to Short Circuits in I/O Signal Lines	§5.5.2
	Immunity to Potential Differences Between Supplies	§5.5.3
	Motor Stall	§5.5.4
	Radiated Immunity: BCI	§5.8.1
	Magnetic Field Immunity	§5.8.3
	Transient Immunity of Supply Lines	§5.9.1
	Transient Immunity of I/O or Sensor Lines – Coupling Clamp (CCC)	§5.9.2
	Transient Immunity of I/O or Sensor Lines - Direct Capacitive Coupling (DCC)	§5.9.3
	Transient Immunity of LED Lighting Power Lines	§5.9.4
	ESD Handling Test	§5.10.1
ESD Operating Test	§5.10.2	