

ISO 11451-3:2024-06 (E)

Road vehicles - Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 3: On-board transmitter simulation

Contents	Page
Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Test conditions	1
5 Test location	2
5.1 General.....	2
5.2 Absorber lined shielded enclosure (ALSE).....	2
5.3 Outdoor test site.....	2
6 Test instrumentation	2
6.1 General.....	2
6.2 Signal sources.....	3
6.2.1 Transmitters with antenna outside the vehicle.....	3
6.2.2 Transmitters with antenna inside the vehicle.....	3
6.3 Power monitoring.....	3
6.3.1 General.....	3
6.3.2 Dual directional coupler.....	3
6.3.3 Low loss coaxial cable.....	4
6.4 Vector network analyser (VNA).....	4
6.5 Antennas.....	4
6.5.1 Simulated on-board transmitters.....	4
6.5.2 Simulated portable transmitter.....	5
6.6 Stimulation and monitoring of the vehicle.....	5
7 Test set-up	5
7.1 Transmitters with antenna outside the vehicle.....	5
7.2 Transmitters with antenna inside the vehicle.....	8
7.2.1 General.....	8
7.2.2 Simulated portable transmitters.....	8
8 Test procedure	9
8.1 General.....	9
8.2 Test plan.....	9
8.3 Test method.....	10
8.3.1 Transmitters with antenna outside the vehicle.....	10
8.3.2 Transmitters with antenna inside the vehicle.....	11
8.4 Test report.....	12
Annex A (normative) Net power characterization procedure	13
Annex B (informative) Typical characteristics and use of transmitters	26
Annex C (informative) Characteristics of simulated portable transmitter antenna	29
Annex D (informative) Function performance status classification (FPSC)	50
Bibliography	51