**SCOPE 257 ЛИ**

**Sofia, 30.09.2024**

**BULGARIAN INSTITUTE OF METROLOGY**

**ELECTROMAGNETIC COMPATIBILITY TEST LABORATORY**

**Management** address**:** 1797 Sofia, 52B Dr. G. M. Dimitrov Blvd, Floor 2

Laboratory address**:** 1784 Sofia, Poligona, 2 Prof. Petar Mutafchiev Str.

**To perform testing of**:

| Type of the scope: flexible | | | |
| --- | --- | --- | --- |
| **№** | **Tested products** | **Type of test / characteristic** | **Testing methods**  **(standard / validated method)** |
| 1 | 2 | 3 | 4 |
| 1. | Electrical appliances (household appliances, microwave ovens, induction hobs, personal hygiene and care appliances, slot machines, movie and slide projectors, battery chargers and external power sources for use with electrical appliances), power tools, and electric/electronic toys | 1.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 1.2. Radiated disturbances (frequency range 30 MHz-1 GHz for equipment under test battery operated (without cables connected to them), whose the largest dimension is less than or equal to 300 mm) | БДС EN IEC 61000-4-20 |
| 1.3. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 1.4. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 1.5. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 1.6. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 1.7. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11 /AC:06 |
| 2. | Multimedia equipment (equipment for entering, storing, displaying, retrieving, processing, or controlling data and telecommunication communications; audio equipment; video equipment; advertising lighting control equipment) | 2.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1 (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 2.2. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 2.3. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 2.4. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 2.5 Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 2.6. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/  AC:06 |
| 3. | Medical electrical equipment and medical electrical systems | 3.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1 (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 3.2. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 3.3. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 3.4. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 3.5. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 3.6. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 3.7. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 4. | Uninterruptible powersystems | 4.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 4.2. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 4.3. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 4.4. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 4.5. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 5. | Programmable controllers and their associated peripherals | 5.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 5.2. Radiated disturbances (frequency range 30 MHz-1 GHz for equipment under test battery operated (without cables connected to them), whose the largest dimension is less than or equal to 300 mm) | БДС EN IEC 61000-4-20 |
| 5.3. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 5.4. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 5.5. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 5.6. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 5.7. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 5.8. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11 /AC:06 |
| 6. | Components of fire alarm systems, alarm systems, anti-intrusion and burglary systems, video surveillance systems, access control systems | 6.1. Electrostatic discharges.  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 6.2. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 6.3. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 6.4. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 6.5. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 7. | Electrical equipment for measurement, control and laboratory use (electrical measurement and test equipment, electrical control equipment, and electrical laboratory equipment) | 7.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 7.2. Electrostatic discharges.  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 7.3. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 7.4. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 7.5. Conductive disturbances induced by radio frequency fields. | БДС EN 61000-4-6 |
| 7.6. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 7.7. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 8. | Devices installed in electrical substations requiring high reliability | 8.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1 (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 8.2. Electrostatic discharges.  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 8.3. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 8.4. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 8.5. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 8.6. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 8.7. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11 /AC:06 |
| 9. | Electric lighting (lighting equipment, lighting part of multifunctional equipment, equipment emitting ultraviolet and infrared light for domestic and industrial applications, advertising signs, decorative lighting, emergency signs) | 9.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1 /AC:09 |
| 9.2. Radiated disturbances (frequency range 30 MHz-1 GHz for equipment under test battery operated (without cables connected to them), whose the largest dimension is less than or equal to 300 mm) | БДС EN IEC 61000-4-20 |
| 9.3 Radiated electromagnetic disturbances (frequency range 9 kHz - 30 MHz) | БДС EN IEC 55015 (LLAS) |
| 9.4. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 9.5. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 9.6. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 9.7. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 9.8. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 9.9. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 10. | Electronic scales with non-automatic operation | 10.1. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 10.2. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 10.3. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 10.4. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 10.5. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 11. | Electrical and electronic devices/equipment for use in residential, commercial, public and light industrial environments | 11.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC:09 |
| 11.2. Radiated disturbances  (frequency range 30 MHz-1 GHz for equipment under test battery operated (without cables connected to them), whose the largest dimension is less than or equal to 300 mm) | БДС EN IEC 61000-4-20 |
| 11.3. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 11.4. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 11.5. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 11.6. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 11.7. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 11.8. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |
| 12. | Electrical and electronic devices/equipment intended for use in industrial environments | 12.1. Disturbance voltage at power port (frequency range 150 kHz - 30 MHz) | БДС EN 55016-2-1  (V-networks (AMNs))  БДС EN 55016-2-1/A1  БДС EN 55016-2-1/AC-09 |
| 12.2. Radiated disturbances (frequency range 30 MHz-1 GHz for equipment under test battery operated (without cables connected to them), whose the largest dimension is less than or equal to 300 mm) | БДС EN IEC 61000-4-20 |
| 12.3. Electrostatic discharges:  Air discharge  Contact discharge | БДС EN 61000-4-2 |
| 12.4. Electrical fast transient/burst impulses | БДС EN 61000-4-4 |
| 12.5. Voltage surge | БДС EN 61000-4-5  БДС EN 61000-4-5/A1 |
| 12.6. Conductive disturbances induced by radio frequency fields | БДС EN 61000-4-6 |
| 12.7. Power frequency magnetic fields | БДС EN 61000-4-8 |
| 12.8. Voltage dip, short interruption, and voltage variation | БДС EN IEC 61000-4-11  БДС EN IEC 61000-4-11/ AC:06 |

***Flexible scope:*** *Implementing a new version of standards/documents or standards/ documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by the laboratory.*