Schedule of Accreditation
issued by
United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

UKAS TESTING **4515** **Accredited to ISO/IEC 17025:2017**	**Jordan Design and Development Bureau** **Issue No:** 031 **Issue date:** 13 May 2026
JODDB **Jabal Amman** **PO Box 928125** **Amman 11190** **Jordan**	**Contact: Eng. Issa Rawashdeh** **Acting Head of Test & Evaluation Department** **Tel: + 962 (2) 6256024 ext. (5014)** **Fax: + 962 (2) 6256024** **E-Mail: irawashdeh@joddb.com** **Website: www.joddb.com**

Testing performed by the Organisation at the locations specified below

Locations covered by the organisation and their relevant activities are detailed on the following 2 pages

Location details		Activity	Location code
Address King Hussein Main Workshops JODDB Test and Evaluation Centre Ballistic Testing Facilities (BTF)	**Local contact** Eng. Ali Sardyah Acting Head of Weapons, Ammunition & Armor Testing Tel: + 962 (2) 6256024 ext. (5014) Fax:+ 962 (2) 6256024 E-Mail: asardyah@joddb.com Website: www.joddb.com	Ballistics Testing	JODDB Ballistic Testing Facility Indoor Range
Ballistic Testing Facilities (BTF) Live Firing Range		Ballistics Testing	JODDB Ballistic Testing Facility Outdoor Range
Blast Testing Facilities (BTF) Live Firing Range		Blast Firing	JODDB Blast Testing Facility Outdoor Range

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Testing performed by the Organisation at the locations specified

Location details		Activity	Location code
Address King Hussein Main Workshops JODDB Test and Evaluation Centre Automotive Testing Facilities (ATF)	**Local contact** Eng. Ali Aqeel Acting Head of Automotive Testing Tel: + 962 (2) 6256024 ext. (3082) Fax:+ 962 (2) 6256024 E-Mail: aaqeel@joddb.com Website: www.joddb.com	Automotive Testing	JODDB Automotive Testing Facility Indoor
Automotive Testing Facilities (ATF) Test Track		Automotive Testing	JODDB Automotive Testing Facility Outdoor
Address King Hussein Main Workshops JODDB Test and Evaluation Centre Electrical Testing Facilities (ETF)	**Local contact** Eng. Nidal Al-qawabah Head of Electrical and Electronic Testing Tel: + 962 (2) 6256024 ext. (3083) Fax:+ 962 (2) 6256024 E-Mail: nqawabah@joddb.com Website: www.joddb.com	Electrical Testing	JODDB Electrical Testing Facility

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Military Armoured Vehicle and Single Plate and Engineered Targets	**Ballistic Resistance** Kinetic Energy "Multi-Hit" Test. Level 1 Level 2 Level 3 Level 4 Level 5 Level 6 **Mine Blast Resistance** Occupant Survivability (Safety) Tests Crew Casualty /Injury Criteria of Vehicle Occupants GRENADE AND BLAST MINE THREAT LEVELS: **Level 4:** 4b - Mine Explosion under belly "10 kg (explosive mass) Blast AT Mine" 4a - Mine Explosion pressure activated under any wheel or track location "10 kg (explosive mass) Blast AT Mine" **Level 3:** 3b - Mine Explosion under belly "8 kg (explosive mass) Blast AT Mine" 3a - Mine Explosion pressure activated under any wheel or track location "8 kg (explosive mass) Blast AT Mine" **Level 2:** 2b - Mine Explosion under belly "6 kg (explosive mass) Blast AT Mine" 2a - Mine Explosion pressure activated under any wheel or track location "6 kg (explosive mass) Blast AT Mine" **Level 1:** Hand grenades, unexploded artillery fragmenting sub-munitions, and other small anti personnel explosive devices detonated anywhere under the vehicle.	**NATO STANAG 4569 Edition 2 (18 Dec 2012)** Protection levels for occupants of armoured vehicles - (KE-Threat) **NATO STANDARD AEP-55 (Vol.1 Edition C)** **NATO STANAG 4569 Edition 2 (18 Dec 2012)** Protection levels for occupants of armoured vehicles (grenade and blast mine threat) **NATO STANDARD AEP-55 (Vol.2 Edition 2)**	JODDB Ballistic testing facility Indoor Range JODDB Ballistic testing facility Outdoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Special Protected Vehicles (Armored) Ballistic Shelters and Guard Rooms	**Bullet-Resistance** – VR 1 & SR 1 – VR 2 & SR 2 – VR 3 & SR 3 – VR 4 & SR 4 – VR 5 & SR 5 – VR 6 & SR 6 – VR 7 & SR 7 – VR 8 & SR 8 – VR 9 & SR 9 – VR10 & SR 10	Testing guideline special protected vehicles - standards, classifications and testing methods **VPAM-BRV** Edition 3 Version: 15 March 2021 – levels defined in VPAM-APR 2006, VPAM BSR 2020	JODDB Ballistic testing facility Indoor Range
Special Protected Vehicles (Blast Resistance)	- **Side Blast Test** - 4m from the test vehicle - 2m from the test vehicle - **Under Vehicle (Floor)** - Dm51 Qty.1 - Dm51 Qty.2 - HG85 (CH) Qty.1 - HG85(CH) Cty.2 - DM31 (Surrogate) Qty.1 - **Roof Protection** - Dm51 Qty.1 - Dm51 Qty.2 - HG85 (CH) Qty.1 - HG85(CH) Cty.2	Special Protected Vehicle (Blast Resistance) **VPAM ERV 2010** **STAND: 18.05.2011**	JODDB Blast Testing Facility Outdoor Range
Civilian Armoured Vehicle	– **Ballistic (BA) test method & levels** BA-A / BA-B / BA-C BA-F / BA-G / BA-H / BA-J BA-L / BA-M / BA-N / BA-P / BA-SG – **Fragment (FR) test method & levels** FR-A / FR-B / FR-C / FR-D FR-E / FR-F – **Side blast (SB) test method & levels** SB-A / SB-B / SB-C / SB-D / SB-E – **Under vehicle (UB) blast test method & levels** UB-A / UB-B – **Roof blast (RB) test method & levels** RB-A / RB-B	**PAS 300:2018** Civilian armoured vehicle – Test methods for ballistic and blast protection	JODDB Ballistic Testing Facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Ballistic Helmets	**Ballistic Penetration** – Type I – Type II-A – Type II – Special Type **Ballistic Impact Attenuation** – Type I – Type II-A – Type II – Special Type	**NIJ Standard 0106.01** for Ballistic Helmets. **VPAM HVN 2009** Status 04.04.2017 Bullet Resistance Anchorage Points Residual Energy **VPAM - APR 2006** levels defined in VPAM-APR 2006	JODDB Ballistic testing facility Indoor Range
Personal Body Armor (Flexible Vests and Jackets, Hard Armors and Plate Inserts) Male and Female	**Ballistic Penetration and Backface Signature Test (P-BFS)** – Type IIA – Type II – Type IIIA – Type III – Type IV – Special Type	**NIJ Standard–0101.04** Ballistic Resistance of Personal Body Armor **VPAM BSW 2006** Stand: 14.05.2009 levels defined in VPAM-APR 2006	JODDB Ballistic testing facility Indoor Range
Personal Body Armor (Flexible Vests and Jackets, Hard Armors and Plate Inserts) Male and Female	**Baseline Ballistic Limit** – Type I – Type IIA – Type II – Type IIIA – Type III – Type IV – Special Type	**NIJ Standard–0101.04** Ballistic Resistance of Personal Body Armor **VPAM BSW 2006** Stand: 14.05.2009 levels defined in VPAM-APR 2006	JODDB Ballistic testing facility Indoor Range
Personal Body Armor (Flexible Vests and Jackets, Hard Armors and Plate Inserts) Male and Female	**Perforation - Backface Signature (P-BFS) and Deformation (P-BFD) tests.** – Type IIA & BL Test Level 1 (NIJ HG1) – Type II & BL Test Level 2 (NIJ HG2) – Type IIIA & BL Test Level 3 (NIJ RF1) – Type III & BL Test Level 4 (NIJ RF2) – Type IV & BL Test Level 5 (NIJ RF3) – Special Type	**NIJ Standard–0101.06** Ballistic Resistance of Body Armor **VPAM BSW 2006** Stand: 14.05.2009 levels defined in VPAM-APR 2006 **NIJ Standard–0101.07** Ballistic Resistance of Body Armor	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Composite Armour	**Ballistic Deformation Test** **V50 Ballistic Limit Protection Test**	**MIL-PRF-46103E** 6 January 1998 **NIJ Standard–0101.06**	JODDB Ballistic testing facility Indoor Range
Personal Body Armour (Flexible Vests and Jackets, Hard Armors and Plate Inserts) Male and Female	**Ballistic Limit (BL) Determination** – Type IIA & BL Test Level 1 (NIJ HG1) – Type II & BL Test Level 2 (NIJ HG2) – Type IIIA & BL Test Level 3 (NIJ RF1) – Type III & BL Test Level 4 (NIJ RF2) – Type IV & BL Test Level 5 (NIJ RF3) – Special Type	**NIJ Standard–0101.06** Ballistic Resistance of Body Armor **NIJ Standard–0101.07** Ballistic Resistance of Body Armor **VPAM BSW 2006** Stand: 14.05.2009 levels defined **in VPAM-APR** 2006	
Stab Resistant Body Armor System	Stab Resistant Protection Level Strike Energies Engineered Knife Blade P1/S1 & Engineered Spike **“E1” Strike Energy** Level 1 (Low Threats: 24 ± 0.5 J) Level 2 (Medium Threats: 33 ± 0.6 J) Level 3 (High Threats: 43 ± 0.6 J) **“E2” Over Test Strike Energy** Level 1 (Over test condition: 36 ± 0.60 J) Level 2 (Over test condition: 50 ± 0.70 J) Level 3 (Over test condition: 65 ± 0.80 J)	**NIJ Standard–0115.00** March 2020 Stab Resistance of Personal Body Armor	JODDB Ballistic Testing Facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Personal Armour (Hard Armour, Soft Armour, Helmets, Face and Eye Protection System)	Protection Against: Bullets Threats “KE” and Fragmentation Threats “FSP” **KE Threat:** A, Lead Core Projectiles (A1, A2, A3, A5 & A Special) B, Mild Steel Core Projectiles (B2, B3, B4, B5 & B Special) C, Hardened Steel Core Projectiles (C4, C5, C6, C7 & C Special) D, Tungsten Cobalt (WC) Core Projectiles (D1, D3, D5 & D Special) **FSP Threat:** C.1, Chisel Nose Cylinders Fragments (F1, F2, F3, F4, F5 & F6) C.2, Chisel Nose Cylinders Fragments (G5, G6, G8 & G9) C.3, Right Circular Cylinders Fragments (R1, R2, R3, R4, R5, R6 & R7)	**STANAG 2920** (Edition 3) / June 2015 CLASSIFICATION OF PERSONAL ARMOUR **NATO AEP-2920** (Edition A Version 1)/June 2015 PROCEDURES FOR THE EVALUATION AND CLASSIFICATION OF PERSONAL ARMOUR (BULLET AND FRAGMENTATION THREATS)	JODDB Ballistic Testing Facility Indoor Range
Structures	Projectiles (A1 to A5) High Explosives (D1 to D6)	**STANAG 2280**	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Glass in Building Security Glazing (Armoured)	**Resistance Against Bullet Attack** – BRI – BR2 – BR3 – BR4 – BR5 – BR6 – BR7 – SG1 – SG2	**EN 1063: 2000** Glass in building-Security glazing - Testing and classification of resistance against bullet attack.	JODDB Ballistic testing facility Indoor Range
Glass and Glazing system (Armoured)	Classification of bullet-resistance Handguns, Rifles, Shotguns & Open Class – HG1 – HG2 – HG3 – R1 – R2 – SG1 – SG2 – SG3 – Open class	**ISO 16935:2007** Glass in building— Bullet-resistant security glazing— Test and classification Testing the bullet-resistance of glazing at extreme temperatures. (Within the range: - 20 ˚C to + 40 ˚C)	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Windows, Doors, Shutters and Blinds (Armoured)	**Bullet Resistance** – FB1 – FB2 – FB3 – FB4 – FB5 – FB6 – FB7 – FSG – Ammunition (Other Type & Calibres)	**BS EN 1522 : 1999** Windows, doors, shutters and blinds- Bullet Resistance- Requirements and classification. **BS EN 1523 :1999** Windows, doors, shutters and blinds Bullet resistance - Test method.	JODDB Ballistic testing facility Indoor Range
Security Glazing Systems Against Explosive Threats	THREAT LEVELS: Vehicle bombs: - EXV45(X) - EXV33(X) - EXV25(X) - EXV19(X) - EXV15(X) - EXV12(X) - EXV10(X)	**ISO 16933:2007(E)** First edition 2007-07-01 Glass in building — Explosion-resistant security glazing — Test and classification for arena air-blast loading	JODDB Blast Testing Facility Outdoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Security Glazing Systems Against Explosive Threats Continued	Hand-carried satchel bombs - SB1(X) - SB2(X) - SB3(X) - SB4(X) - SB5(X) - SB6(X) - SB7(X) Special Type:	**ISO 16933:2007(E)** First edition 2007-07-01 Glass in building — Explosion-resistant security glazing — Test and classification for arena air-blast loading	JODDB Blast Testing Facility Outdoor Range
Protective Materials (Metals, Ceramics, Transparent Glazing, Fabric, and Fabric-Reinforced Plastics)	**Ballistic Resistance** – Type I – Type IIA – Type II – Type III-A – Type III – Type IV – Special Requirement	**NIJ Standard 0108.01** for Ballistic Resistant Protective Materials.	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Plate Materials (Armoured)	**Triangle Shooting** – PM 1 – PM 2 – PM 3 – PM 4 – PM 5 – PM 6 – PM 7 – PM 8 – PM 9 – PM 10	Test guideline, Bullet Resistant Plate Materials **VPAM PM** Edition 3 15 March 2021. levels defined in VPAM-APR 2006	JODDB Ballistic testing facility Indoor Range
Plate Materials (Armored)	**Calculation of Ballistic Limit V50** – PM 1 – PM 2 – PM 3 – PM 4 – PM 5 – PM 6 – PM 7 – PM 8 – PM 9 – PM 10	Test guideline, Bullet Resistant Plate Materials **VPAM PM** Edition 3 15 March 2021. levels defined in VPAM-APR 2006	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Plate Materials (Armored)	**Multi-Hit Test** – PM 1 – PM 2 – PM 3 – PM 4 – PM 5 – PM 6 – PM 7 – PM 8 – PM 9 – PM 10	Test guideline, Bullet Resistant Plate Materials **VPAM PM** Edition 3 15 March 2021. levels defined in VPAM-APR 2006 **ISO 6509-1** 15-8-2016 Edition 4 Metallic Materials – Rockwell hardness test Part 1.	JODDB Ballistic testing facility Indoor Range
Logistic and Light Armored Vehicles (Single Plate Targets) / Glass	**Ballistic Resistance** Kinetic Energy Only “Partial” Using Non-Fragmenting Ammunition. – Level 1 – Level 2 – Level 3	**STANAG 4569** Land (Edition 2) - Protection Levels for Occupants of Logistic and Light Armoured Vehicles **AEP-55, Volume 1** Edition 2 Procedures for Evaluating the Protection Level of Logistic and Light Armoured Vehicles	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
NATO Weapons & Ammunition of Calibres 4.6 mm, 5.56 mm, 7.62 mm, 9mm, 12.7 mm Propellant for Small Arms Ammunition		**NATO STANDARD / AEP-97** Edition A Version 1: October 2020 MULTI CALIBRE MANUAL OF PROOF AND INSPECTION (M-C MOPI)	JODDB Ballistic testing facility Indoor Range
	Bullet Extraction (Pull test)	M-C MOPI Section No. 25 of **AEP-97Ed.A & MIL-P-3984J 4.5.2.1.2**	
	Primer Sensitivity	M-C MOPI Section No. 24 of **AEP-97Ed.A**	
	Waterproof	M-C MOPI Section No. 27 of **AEP-97Ed.A**	
	Combination Electronic Pressure, Velocity & Action Time (EPVAT)	M-C MOPI Section No. 12 of **AEP-97Ed.A & MIL-P-3984J** 3.2.1 to 3.2.3	
	EPVAT extreme temperature 52 °C & -54 °C	**MIL-P-3984J** 3.2.11, 3.2.11-1, 3.2.11-2, 3.2.11-3, 4.5.2.3	
	Precision	M-C MOPI Section No. 18 of **AEP-97Ed.A**	
	Function and Casualty	M-C MOPI Section No. 14 of **AEP-97Ed.A** & **MIL-P-3984J** 3.2.9 , 4.5.2	
	Trajectory Match Test using target simulation	M-C MOPI Section No. 20 of **AEP-97Ed.A**	
	Residual Stress Test	M-C MOPI Section No. 23 of **AEP-97Ed.A**	
	Terminal Effects Test	M-C MOPI Section No. 19 of **AEP-97Ed.A**	
	Smoke and Flash Test	M-C MOPI Section No. 17 of **AEP-97Ed.A & MIL-P-3984J** 3.2.5	
	Link Test	M-C MOPI Section No. 15 of **AEP-97Ed.A**	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
C.I.P. Small Arms Ammunition	– Pressure measurements – Velocity – Kinetic energy	**C.I.P.** Permanent International Commission for the Proof of Small-arms / Comprehensive Edition of Adopted C.I.P. Decisions / Edition 2011.	JODDB Ballistic testing facility Indoor Range
Auto-loading Pistols for Police Officers	– Visual Inspection – Dimensional – Function – Firing – Drop Safety – Drop Function	**NIJ Standard-0112.03** Autoloading Pistols For Police Officers	JODDB Ballistic testing facility Indoor Range
Pistol, Semi-automatic, Compact, 9 mm	– Headspace – Trigger Pull – High Pressure Resistance – Functioning – Accuracy and Dispersion – Reliability – Durability – Safety – Maintainability – Environmental (High Temperature) – Environmental (Low Temperature) – Rough Handling	**MIL-P-71012A(AR)** MILITARY SPECIFICATION PISTOL, SEMIAUTOMATIC, COMPACT, 9 MM	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Carbine, 5.56 mm	– Firing Pin Indents – Trigger Pull – High Pressure Resistance – Function Firing – Cyclic Rate of Fire – Targeting and Accuracy – Endurance	**MIL–DTL–71186A** DETAIL SPECIFICATION CARBINE, 5.56 MILLIMETER	JODDB Ballistic testing facility Indoor Range
Machine Gun, 7.62 mm	– Headspace – Firing Pin Indent – Trigger Pull – High Pressure Resistance – Functioning – Targeting and Accuracy – Endurance – Reliability	**MIL-M-45013E (AR)** Military Specification Machine Gun, 7.62 mm	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Gun, Machine; Calibre 0.50	– Headspace – Timing – Firing Pin Release – Firing Pin Indent – High Pressure Resistance – Functioning – Belt pull – Cyclic Rate of Fire – Targeting and Accuracy – Endurance – Barrel Erosion	**MIL-DTL-001298D (AR)** Detail Specification Gun, Machine; Calibre .50, Browning, M2, Heavy Barrel	JODDB Ballistic testing facility Indoor Range
12-Gauge Shotguns	– Visual Inspection Test – Dimensional Measurement Test – Functional Tests – Safety Test – Firing Tests – Drop-Safety Test – Drop-Function Test	12-Gauge Shotguns for Police Use **NIJ Standard-0113.00**	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Shotguns	– Dimensions Test – Proof of the Weapons Test	**C.I.P.** Permanent International Commission for the Proof of Small-arms / Comprehensive Edition of Adopted C.I.P. Decisions / Edition 2011. / "Testing of Smoothbore Weapons - C.I.P. Calibre 12 Gauge	JODDB Ballistic testing facility Indoor Range
Shot Cartridges	Dimensions to Check Test. Maximum Average Pressure Test.	**C.I.P.** Permanent International Commission for the Proof of Small-arms / Comprehensive Edition of Adopted C.I.P. Decisions / Edition 2011. / "Testing of Ammunition for Smoothbore Firearms - C.I.P. Calibre 12 Gauge"	JODDB Ballistic testing facility Indoor Range
Military 9mm Ammunition - XM882	– Bullet Extraction – Residual Stress – Waterproofness – Accuracy – Function & Casualty – Chamber Pressure and Velocity – Primer Sensitivity	**MIL-C-70508**	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Military 5.56mm Ammunition - M855, M193	– Bullet Extraction – Residual Stress – Waterproofness – Penetration – Accuracy – Matching – Function & Casualty – Velocity, chamber pressure, port pressure	**MIL-C-63989** **MIL-C-9963F**	JODDB Ballistic testing facility Indoor Range
Military 7.62mm Ammunition - M80	– Bullet Extraction – Residual Stress – Waterproofness – Accuracy – Function & Casualty – Velocity, chamber pressure, port pressure	**MIL-C-46931F**	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Military 12.7mm Ammunition - M33	– Bullet Extraction – Residual Stress – Waterproofness – Accuracy – Function & Casualty – Chamber pressure	**MIL-C-10190D**	JODDB Ballistic testing facility Indoor Range
Small Arms - Hand and Shoulder Weapons and Machineguns	– Initial Inspection Test (Excluding spring tests) – Cookoff Test – Reliability and Durability Test – Accuracy and Dispersion Test – Adverse Conditions (Extreme Temperature - High T. Test up to +52 C) – Adverse Conditions (Humidity Test) – Adverse Conditions (Water Spray (rain) Test) – Flash Test – Smoke Test – Rough Handling Test – Barrel Performance Test – Ammunition Compatibility Test – Accessory Compatibility Test – Logistic Supportability Test – Post-Fire Inspection Test Excluding spring tests) – Proof Firing Test – Parts Interchange Test	**TOP 3-2-045** 17 September 2007 Test Operations Procedure - Small Arms - Hand and Shoulder Weapons and Machineguns	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Ballistic testing of bullet-resisting equipment and materials Non-metallic Material Metallic Material Materials Assemblies: Gun Ports Speaking Apertures Deal trays and package passers Intercommunication systems Barriers Building components	**THREAT LEVELS:** **Level 1** **Level 2** **Level 3** **Level 4** **Level 5** **Level 6** **Level 7** **Level 8** **Level 9** **Level 10** **Supplementary Shotgun:** 12-Gauge rifled lead slug, 437 Grain and 00 lead buckshot (12 pellets), 650 Grain **Special Type:** as supplied or defined by the customer	**UL 752 Edition 11** Bullet resisting equipment	JODDB Ballistic testing facility Indoor Range

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Individual Weapons / Light - Medium - Heavy Support Weapons Testing:	Firing Tests Carried out under Non-normal Operational Conditions: -	**NATO M-C MOPI ACC225** NATO UNCLASSIFIED Releasable to IP and Singapore (152 - 221)	JODDB Ballistic testing facility Indoor Range
	- Cold Test		
Handguns	- High Temperature Test		
Submachineguns	- Temperature & Humidity Test		
Assault Rifles	- Mud Test		
Precision Rifles	- Dynamic Sand & Dust Test		
Machine Guns	- Accelerated Water Spray Test		
Grenade Launchers	- Safety Drop Test: 1.5 Meter (5 Feet)		
Shotguns	- Cook-Off and Barrel Heating Test		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Wheeled vehicle A limit of 4x4 vehicle with max weight 20000kg Wheeled and Tracked vehicles	**Vehicle Characteristics** 4.2.1 Physical Dimensions **Acceleration; Maximum & minimum speed tests** 5.1 Maximum Speed 5.2 Acceleration Test **Vehicle Fuel Consumption** 4.1.1 Road Load Test 4.1.2.Full load test 4.1.3 No Load Test **Cooling Systems (Automotive)** 4.3 Full Load Cooling (WOT) • Max rated engine power • Max engine torque Drawbar pull (4.2 Hard surface) **Braking Wheeled Vehicles** 4.2.3 Braking Effectiveness **Gradeability and side slope performance** 4.1 Longitudinal Grade Performance 4.1.1 Braking system grade holding ability 4.1.2 Vehicle engine and transmission performance **4.2 Side Slope performance** 54m track length **Standard Obstacles** 4.1 Bridging 4.2 Wall climbing **Runflat Testing** 4.6 (a) Paved Test Ride Dynamics and evaluation of human exposure to whole body Vibration (4.2 ISO 2631-1 Technique)	**TOP 2-2-500** **14 February 2008** Vehicle Characteristics **TOP 2-2-602A** **25 March 2019** Acceleration & Speed **TOP 2-2-603A** **10 May 2012** Vehicle Fuel Consumption **TOP 2-2-607** **27 September 2006** Cooling Systems (Automotive) **TOP 2-2-604** **TOP 2-2-608** **20 May 2008** Braking **TOP 02-2-610** **03 December 2009** Gradeability and side slope performance **TOP 2-2-611A** Standard Obstacles **TOP 2-2-698** **09 September 2015** **TOP 01-1-014B**	JODDB Automotive Testing Facility Outdoor

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Wheeled vehicle A limit of 4x4 vehicle with max weight 20000kg (cont'd)	**Wheeled vehicle centre of gravity** 4.4 Weight Method	**TOP 2-2-800** **31 December 1993** Wheeled vehicle centre of gravity	JODDB Automotive Testing Facility
Wheeled and Tracked vehicles (cont'd)	**Weight Distribution and Ground Pressure** 4.1 Weight Distribution Test	**TOP 2-2-801** **7 August 1981** Weight Distribution and Ground Pressure	Outdoor
	Technical requirements for Military Logistic vehicles and Towed Equipment 2.4 Vehicle Tyre Inflation Times (CTIS) central tire inflation system 2.5 Vehicle Instruments Calibration (gauges) 3.1.2 Max Geared Speed 3.2.1 Acceleration from the rest Test 3.3 Vehicle Turning Circle Test 9.2 Vehicle Rain Test - Vertical Jets 10.1 24h Battlefield Day - Vehicle On-road driving test (excluding Section 10.3)	**RSA MIL HDBK-62 – Appendix B** General Characteristics Vehicle Performance Environment 24hour Battlefield day	
Vehicle of category: **M:** Motor vehicles having at least four wheels or having ' three wheels when the maximum weight exceeds 1 metric ton, and used for the carriage of passengers Motor vehicle wheeled/ Vehicle of category: N: Motor vehicles having at least four wheels or having three wheels when the maximum weight exceeds 1 metric ton, and used for the carriage of goods.	Braking Test and Performance of Braking Devices Type O test with engine disconnected (ordinary performance with brakes cold).	COUNCIL DIRECTIVE of 26 July 1971 **(71/320/EEC) Annex II /section 1.2.).**	JODDB Automotive Testing Facility Outdoor
Wheeled and tracked vehicles	Exterior width dimensions Exterior height dimensions Exterior length dimensions Ground clearance dimensions	**SAE J1100**	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical Road Vehicles	Maximum Speed Test Maximum Thirty Minute Speed Test Acceleration Ability 0 to 50 km/hr Test Acceleration Ability 0 to 80 km/hr Test Hill Starting Ability Test Reference Energy Consumption and Range Test	**ISO 8715:2001** Electrical Road vehicles / Road Operating characteristics **ISO 8714:2002** Electrical Road Vehicles / Test Procedures for passenger cars and light commercial vehicles	JODDB Automotive Testing Facility Outdoor
Ground Vehicles	**5.6.2 Vehicle Seat System** **5.6.2.1 Dimensions and Clearances** **5.6.2.2 Seat Clearances** 5.6.2.2.1 Head clearance 5.6.2.2.2 Body clearance in the fore-aft direction 5.6.2.2.3 Body clearance in the horizontal direction 5.6.2.2.4 Body clearance in the vertical direction **5.6.2.8 Spacing Between Seats** 5.6.2.8.1 Bench seating 5.6.2.8.2 Discrete seating **5.6.3 Controls** **5.6.3.1 Vehicle Controls** 5.6.3.1.3 Steering mechanism 5.6.3.1.4 Steering 5.6.3.1.5 Braking 5.6.3.1.6 Pedals **5.6.4 Displays** **5.6.4.1 Driver's Display** 5.6.4.1.1 Fore/aft 5.6.4.1.2 Horizontal 5.6.4.1.3 Vertical **5.6.5 Visibility** **5.6.5.2 Stations with Windshields** 5.6.5.2.5 Ground intercept. **5.6.10 Stowage** 5.6.10.1 Stowed gear and equipment	**In house Procedure** JODDB/TEST/ATF/TP/ MIL 1472H_1 in accordance with the detail of MIL STD 1472H	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Road Vehicles	Acoustics – Interior Vehicle Noise	**ISO 5128:2023** **8.1.2** **8.3.3** **8.3.4**	JODDB Automotive Testing Facility
	Exhaust Gas Emissions	**ISO 3929:2003**	
	Field of vision – Vehicles Minimum ground intercept visibility Forward looking visibility Total lateral visibility	**TOP 3-2-812**	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Enclosures for electrical equipment with a rated voltage not exceeding 1 000 V ac. and 1 500 V dc.)	**IP1X**: protection of persons against access to hazardous parts inside the enclosure with the back of the hand. **IP1X**: protection of the equipment inside the enclosure against ingress of solid foreign objects of ≥ 50mm Ø. **IP2X**: protection of persons against access to hazardous parts inside the enclosure with a finger. **IP2X**: protection of the equipment inside the enclosure against ingress of solid foreign objects of ≥ 12.5mm Ø. **IP3X**: protection of persons against access to hazardous parts inside the enclosure with a tool. **IP3X**: protection of the equipment inside the enclosure against ingress of solid foreign objects of ≥ 2.5mm Ø. **IP4X**: protection of persons against access to hazardous parts inside the enclosure with a wire **IP4X**: protection of the equipment inside the enclosure against ingress of solid foreign objects **IP5X**: protection of persons against access to hazardous parts inside the enclosure. **IP5X**: protection of the equipment inside the enclosure against ingress of solid foreign objects for enclosures *category 1 & 2.* **IP6X**: protection of persons against access to hazardous parts inside the enclosure. **IP6X**: No Ingress of dust. **IPX1**: Protection against water drip 1mm/min water flow **IPX2**: Protection against water drip 3mm/min water flow **IPX3**: Protection against Water Spray +/- 60° from vertical **IPX4**: Protection against Water Spray +/- 180° from vertical **IPX5**: Protection against water jet Nozzle 6.3mm **IPX6**: Protection against water jet Nozzle 12.5mm **IPX7**: Protection of the equipment inside the enclosure against the effects of temporary immersion in water. **IPX8**: Protection of the equipment inside the enclosure against the effects of continuous immersion in water.	Degrees of protection provided by enclosures (IP Code) **IEC 60529** 2013-08 Edition 2.2	JODDB Electrical Testing Facility

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical and Electronic Equipment and materials.	**HIGH TEMPERATURE** Max temp: +150°C Max chamber size 2.0 m x 1.0 m x 1.0 m	IEC 60068-2-2 2007 Test Ab, Ad & Ae MIL STD 810 H Method 501.7 MIL STD 810 G Method 501.5 ISO 16750-4:2023 ISO 16750-4:2012 Clause 5.1	JODDB Electrical Testing Facility
	LOW TEMPERATURE Min temp: -40°C Max chamber size 2.0 m x 1.0 m x 1.0 m Min temp: -60°C Max chamber size 0.8 m x 0.85 m x 0.6 m	IEC 60068-2-1 2007 Test Bb, Bd & Be MIL STD 810 H Method 502.7 MIL STD 810 G Method 502.5 ISO 16750-4:2023 ISO 16750-4:2012 Clause 5.1	
	CHANGE OF TEMPERTAURE Min temp: -60°C Max temp: +150°C	IEC 60068-2-14:2023 Test Na MIL STD 810H Method 503.7 ISO 16750-4:2023 ISO 16750-4:2012 Clauses 5.2, 5.3.1	
	HUMIDITY TESTS Temperature from -40°C to +150°C Humidity from 10 to 98 % rh Max chamber size 2.0 m x 1.0 m x 1.0 m	IEC 60068-2-30 2005 Test Db IEC 60068-2-78 2012 Test Cab MIL STD 810 H Method 507.6 MIL STD 810 G Method 507.5 NIJ 0101.06 Clause 6.2.3.1 ISO 16750-4:2023 Clauses 5.6.2.2 , 5.7	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical and Electronic Equipment for Road Vehicles	**ELECTRICAL TESTS**		JODDB Electrical Testing Facility
	D.C. Supply Voltage Test	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.2	
	Overvoltage Test	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.3	
	Slow Decrease and Increase of Supply Voltage	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.5	
	Discontinues in Supply Voltage	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.6.1 , 4.6.2	
	Reverse Voltage Test	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.7	
	Open Circuit Test	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.9	
	Short Circuit Test	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.10	
	Withstand Voltage	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.11	
	Insulation Resistance	ISO 16750-2:2023 ISO 16750-2:2012 Clause 4.12	
Electrical cells and batteries	Electrical tests / safe operation	IEC 61960-3:2017 clauses: 7.3.1; 7.3.2 ; 7.3.3; 7.4; 7.5; 7.6.1; 7.6.2; 7.6.3; 7.7.1; 7.7.2; 7.7.3; 7.8 IEC 62133-2: 2021-07 clauses: 7.2.1; 7.2.2	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical, Electronic and Programmable Electronic Equipment and Systems to machines not portable by hand.	**ELECTRICAL SAFETY TESTS**		JODDB Electrical Testing Facility
	Basic Protection (Protection by enclosure)	IEC 60204-1:2016(2021) Clauses 6.2.2.a, 6.2.2.b, 6.2.2.c	
	Supply disconnecting device	IEC 60204-1:2016(2021) Clause 5.3.5	
	Protection by insulation of live parts	IEC 60204-1:2016(2021) Clause 6.2.3	
	Over current protection	IEC 60204-1:2016(2021) Clauses 7.2.1, 7.2.2, 7.2.5, 7.2.6, 7.2.8, 7.2.10	
	Protection of motors against overheating	IEC 60204-1:2016(2021) Clauses 7.3.1, 7.3.2, 7.3.3	
	Protection against abnormal temperature	IEC 60204-1:2016(2021) Clause 7.4	
	Protection against the effects of supply interruptions, reduction and restoration	IEC 60204-1:2016(2021) Clause 7.5	
	Motor overspeed protection	IEC 60204-1:2016(2021) Clause 7.6	
	Control circuit voltages	IEC 60204-1:2016(2021) Clause 9.1.2	
	Exceeding operating limits	IEC 60204-1:2016(2021) Clause 9.3.2	
	Operation of auxiliary functions	IEC 60204-1:2016(2021) Clause 9.3.3	
	Suspension of safety functions and/or protective measures	IEC 60204-1:2016(2021) Clause 9.3.6	
	Operator Interfaces and machine mounted	IEC 60204-1:2016(2021)	
	Control devices	Clauses 10.1.2, 10.1.3	
	Actuators	IEC 60204-1:2016(2021) Clauses 10.2.1, 10.2.2	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical, Electronic and Programmable Electronic Equipment and Systems to machines not portable by hand (cont'd)	**ELECTRICAL SAFETY TESTS** (cont'd) Indicator Lights and displays	IEC 60204-1:2016(2021) Clauses 10.3.1, 10.3.2, 10.3.3	JODDB Electrical Testing Facility
	Illuminated push buttons	IEC 60204-1:2016(2021) Clause 10.4	
	Rotary Controls	IEC 60204-1:2016(2021) Clause 10.5	
	Start Devices	IEC 60204-1:2016(2021) Clause 10.6	
	Emergency Stop Devices	IEC 60204-1:2016(2021) Clauses 10.7.1, 10.7.2, 10.8.1, 10.8.3	
	Current carrying capacity in normal service	IEC 60204-1:2016(2021) Clause 12.4	
	Flexible cables	IEC 60204-1:2016(2021) Clause 12.6.3	
	Identification of conductors	IEC 60204-1:2016(2021) Clauses 13.2.1, 13.2.2, 13.2.3, 13.2.4	
	Socket-outlet for accessories	IEC 60204-1:2016(2021) Clause 15,1	
	Warning signs	IEC 60204-1:2016(2021) Clause 16.2	
	Functional identification	IEC 60204-1:2016(2021) Clause 16.3	
	Marking of enclosures of electrical equipment	IEC 60204-1:2016(2021) Clause 16.4	
	Technical documentation	IEC 60204-1:2016(2021) Clauses 17.1, 17.2	
Aircraft Electrical and Electronic equipment	POWER requirement of 28 VDC	**MIL-STD-704F :2004 Methods:** LDC102 ; LDC301; LDC401	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Medical Vehicles and associated equipment - Road Ambulances	**ELECTRICAL SAFETY TESTS** (cont'd) 4.2.3 Battery and alternator 4.2.4 Electrical installation 4.2.5 Visual warning system and audible warning system (siren) 4.2.6 Reversing systems 4.2.7 Exterior illumination lights 4.3.4 Bulkhead 4.3.5 Openings (doors, windows, emergency exits). 4.3.6 Loading area 4.4.2 Safety 4.4.4 Patient's compartment dimensions 4.4.5 Patient and crew seating 4.4.10 Holding system for infusion 4.4.12 Mass reserve 5.4 Testing of rounded edges and radius inside the patient's compartment. 5.4.1 Testing of rounded edges... 5.4.2 Testing of radius inside the patient's compartment.. 5.6.2 Procedure to verify the loading angle of 16° 5.7.1 Type A and B road ambulances... 5.7.2 Type C road ambulances.... 5.8 Procedure to verify the seats dimensions of the patient's compartment. 5.12 Testing of interior lighting (excluding colour temperature) 5.13 Testing of infusion holding system 6.2 Medical devices storage 6.3.1 Requirements for medical devices. Exclude:(6.3.5)	EN 1789 2020+A1:2023	JODDB Electrical Testing Facility

4515 Accredited to ISO/IEC 17025:2017	**Schedule of Accreditation** **issued by** **United Kingdom Accreditation Service** 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK **Jordan Design and Development Bureau** **Issue No:** 031 **Issue date:** 13 May 2026

Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical Systems and Electronic Modules for Road Vehicles	Test Procedure for Direct discharges – component immunity test (powered up tests) Test Procedure for Direct discharges – component immunity test (powered up tests) Component packaging and handling test method (unpowered test) Vehicle Test Method	ISO 10605:2023	JODDB Electrical Testing Facility
Electrical and electronic equipment	Immunity of electrical and electronic equipment to static electricity discharges	IEC 61000-4-2:2008 Clauses**:** 8.3.1; 8.3.2; 8.3.3	
END			