

Laboratory **Testing Laboratory, Controllerate of Quality Assurance (Instruments),
Govt. of India, Ministry of Defence (DGQA), Raipur, Dehradun,
Uttarakhand**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7155**

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Validity **13.04.2018 to 12.04.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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ELECTRONICS TESTING

I.	ENVIRONMENTAL TEST FACILITY			
1.	Optical & Opto-Electronic Equipment	Dry Heat Test	IS 10236 (Part 2) JSS 55555:2012 (Test No. 17)	Ambient to 85°C (Conditioning)
		Cold Test	IS 10236 (Part 3) JSS 55555:2012 (Test No. 20)	Ambient to (-) 40°C (Conditioning)
		Damp Heat Test	IS 10236 (Part 4) JSS 55555:2012 (Test No. 10)	Temperature: 20°C to 40°C 95% RH to 98% RH (Conditioning)
		Driving Rain Test	IS 10236 (Part 14) JSS 55555:2012 (Test No. 12)	Pressure: 200 kPa with 4/8 nozzles spray for 1 hour (Conditioning)
		Dust Test	IS 10236 (Part 13) JSS 55555:2012 (Test No. 14)	40°C (Conditioning) 75 micron dust particles
		Sealing	IS 10236 (Part 18) JSS 55555:2012 (Test No. 23) Procedure 1-2	0 to 14 PSI (Conditioning)
		Tropical Exposure Test	IS 10236 (Part 05) JSS 55555:2012 (Test No. 27)	Temperature: 20°C to 40°C 95% RH to 98% RH (Conditioning)
		Rapid Temperature Cycling (Thermal Shock)	IS 10236 (Part 08) JSS 55555:2012 (Test No. 22)	Temperature: (-) 40°C to 85°C

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		Bump Test	IS 10236 (Part 10) JSS 55555:2012 (Test No. 05)	Acceleration: 10 g, 25g & 40 g Pulse: 6 ms, 9 ms, 11 ms & 16 ms Rate: 1 Bump/s to 3 Bump/s
		Vibration	IS 10236 (Part 11) JSS 55555:2012 (Test No. 28)	Max. Acceleration: 100 g Velocity: 1800mm/s Displacement: 51 mm Frequency: upto 2800Hz
		Shock	IS 10236 (Part 12) JSS 55555:2012 (Test No. 24)	Acceleration max: 50 g

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PHOTOMETRY TESTING

I.	GLASSES/ MIRRORS			
1.	Optical Instruments (Telescopes, Weapon Sights, Red Dot Sight, Binoculars) Passive Night Vision Devices and Monocular Sights	Definition	IS 2754: 1964 (RA 2006) Cl. 4.1.5	Upto 2/3 of FOV
		Magnification	IS 2754: 1964 (RA 2006) Cl. 4.1.1	Unit to 8X
		Field of View	IS 2754: 1964 (RA 2006) Cl. 4.1.4	Upto 45°
		Parallax	IS 2754: 1964 (RA 2006) Cl. 4. 1. 8	1' to 10'
		Dioptric Power	IS 2754: 1964 (RA 2006) Cl. 4. 1. 8, Appendix H	(-) 5 D to + 5D
		Collimation	IS 2754: 1964 (RA 2006) Cl. No. 3.4.1	(-) 30' to + 30'
		Verticality of Image	IS 2754: 1964 (RA 2006) Cl. 4.1.7	2' of arc
		Reticule markings	IS 2754: 1964 (RA 2006) Cl. No. 3.4.6	0.001 mm to 0.500 mm
		Movement of reticule	IS 2754: 1964 (RA 2006) Cl. No. 3.4.6	± 50'
2.	Thermal Imagers operating in the Spectral Range of 3-5 μm & 8-12 μm	Minimum Resolvable Temperature Difference (MRTD)	STANAG No. 4349: 1995 (Edition 1) NATO Standard, GSQR & Design Specification	0.3 Cy/mrad to 4.0 Cy/mrad
		Narrow & wide field of View		Upto 30°
		Current Drawn by UUT		5A