



CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY (C-DIT)

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TESTING AND INSPECTION EQUIPMENT FOR SECURITY FEATURES ON DOCUMENTS AND LABELS

a. Portable Digital Microscope

The portable digital microscope should have a full-colour display, enabling users to inspect objects for quality control and anti-counterfeit detection. It should capture high-magnification images and records videos that can be transferred to a PC. The microscope's driver software includes functions for measuring the length, angle, and area of objects

Sl No	Specification	Compliance (Yes/No)	Deviation if any
1	Display: 2.7-inch full-color TFT LCD screen, 320 x 240 pixels		
2	Display: 2.7-inch full-color TFT LCD screen, 320 x 240 pixels		
3	Magnification: Optical – 10x to 40x; Digital – 15x to 200x		
4	Photo Resolution: 1600 x 1200 pixels (JPG format)		
5	Video Resolution: 640 x 480 pixels (AVI format); 320 x 240 pixels (MP4 format)		
6	Built-in Rulers: Two types (L-type and cross-type) for length measurement		
7	Optional Functions: Photography, scene mode, PC image output, white balance, etc.		
8	Software: Includes application software with professional measurement tools (e.g., length, circumference, radius, diameter, area, angle, etc.)		

9	Software: Includes application software with professional measurement tools (e.g., length, circumference, radius, diameter, area, angle, etc.)		
10	Scope of Supply: should Include USB cable, adapter, protective bag, installation CD, user guide, Li-ion battery, cleaning cloth, wrist strap, and calibration stand.		

b. Optical Magnifier for print inspection application 30 X (10 Nos)

Sl No	Specification	Compliance (Yes/No)	Deviation if any
1	Size – 56 x 61 x 50 mm		
2	Magnification – 30X		
3	Duel lens and high power		
4	Bright white and UV LEDs, switch lights as need		
5	Rotatable optical lens (30mm) for clear vision		
6	Solid Metallic Base with Scale having minimum scale division 0.5mm		
7	3 AG7 DC operated		
8	Accessories- Black protection case		

c. UV -LED Pen type Black light (5 Nos)

Sl No	Specification	Compliance (Yes/No)	Deviation if any
1	Wavelength – 365nm, having Special uniform profile illumination		
2	Detect UV-A materials.		
3	Power – 1.5 W		
4	1 AAA 1.5 V DC operated		
5	Dimension – cylindrical type having length about 110 mm, diameter – 12mm		

6	Metallic base		
7	lens type- convex		
8	light source- LED		
9	Accessories- Lanyard, clip		

d. UV -LED Pen type Black light (5 No)

SI No	Specification	Compliance (Yes/No)	Deviation if any
1	Wavelength – 365nm, having Special uniform profile illumination		
2	Detect UV-A materials		
3	Power – 3 W		
4	1 AA 3V DC operated		
5	Dimension – cylindrical type having length about 100 mm, diameter – 20 mm		
6	Metallic base		
7	lens type- convex		
8	light source- LED		
9	Waterproof - IPX-8		
10	Accessories- Lanyard, O-ring, silicone cap and protective pouch		

e. Universal IR stimulated Taggant (anti-stokes) light reader

SI No	Specification	Compliance (Yes/No)	Deviation if any
1	Handheld device should be able to detect Taggant (anti-stocks) materials embedded in foil or paper.		
2	Excitation stimulation- IR light (980nm)		

3	Dimension – rectangular type having length about 70 mm, diameter – 40mm		
4	Indicator - light and sound (beeper)signals		
5	2 AAA 1.5 V DC operated		
6	light source- LED		

f. Opaque Text Decoder (Round)- (50 No)

Sl No	Specification	Compliance (Yes/No)	Deviation if any
1	Transparent Grating Film having pitch 0.15mm±0.01mm and thickness 300 microns		
2	Line width – 0.035 mm and 0.053 mm		
3	Shape of the device – Round having Device Diameter – 60 mm & Film Diameter – 25 mm		

g. Opaque Text Decoder (Rectangle) (100Nos)

Sl No	Specification	Compliance (Yes/No)	Deviation If any
1	Transparent Grating Film having pitch 0.15mm±0.01mm and thickness 300 microns		
2	Line width – 0.035 mm and 0.053 mm		
3	Shape of the device – Rectangle having size 85mm X 55 mm		