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Forensic sciences - Forged video and image of a person - Multispectral imaging examination

法庭科学 伪造人像 多光谱检验

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

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Forensic Science. Multispectral Testing of Forged Portraits

1 Scope

This document describes the multispectral inspection method for forged portraits in the field of forensic science, including inspection equipment, inspection samples, inspection steps, confidence intervals, and so on.

Calculation and test result presentation.

This document applies to the presentation attack examination of multispectral portraits in the field of forensic science.

2 Normative references

GB/T 45429

3 Terms and definitions

The terms and definitions defined in GB/T 45429 and the following apply to this document.

3.1 Multispectral face image

Multispectral images containing facial information are captured using multispectral portrait acquisition equipment.

4 Inspection Equipment

4.1 Collection light sources and equipment, including cameras equipped with filters, multispectral cameras, hyperspectral cameras, etc. with band-segment collection

capabilities Multispectral imaging equipment, etc.

4.2 Storage devices and computing devices.

4.3 Multi-spectral forged portrait inspection system, functions include but are not limited to.

a) Identify common presentation attack methods such as 2D presentation attack and 3D presentation attack;

b) Make quality judgment on multispectral image data;

c) Input, display and save multispectral portrait data;

d) Single or batch input of multispectral image data;

e) Adjust and optimize the input multispectral image;

f) extracting multispectral features from multispectral portraits;

g) Calculate the confidence level.

5.1 Multispectral Portrait Samples

Pre-check the properties and parameters of the test materials, and select the test materials that meet the following conditions for multi-spectral testing.