

# **Standard Operating Procedures**

for the use of

**EyeDetect**

for Credibility Assessments

# Standard Operating Procedures

## *Overview*

The mission of the **ABC Police Agency's** credibility assessment group is to use EyeDetect as a decision-support tool by providing data to optimize decisions in job applicant screening, ongoing personnel evaluation, or verifying allegations to improve outcomes.

Additional sources of information are of interest to the Chief of Police, background investigators, and hiring professionals in the agency.

The goal of this program is to reduce decision errors, which can be costly. Costs vary by context. When the error is a false negative, **ABC Police Agency** may unknowingly allow a potential insider threat, leading to potential legal challenges and jeopardizing safety. A false negative error postpones or eliminates accountability for the individual, enabling disqualifying behaviors to continue unchecked. A false positive error can result in wasted resources, legal liabilities, and reduced confidence in the assessment process.

To this end and to establish strict rules of professional conduct, the following Standard Operating Procedures shall be followed.

Adherence to these standard operating procedures will ensure the credibility assessment program is effective, valuable, cost-efficient, and productive. It will also ensure that the program is conducted within the guidelines of the **ABC Police Agency**.

EyeDetect test results should not supplant or replace the need for professional expertise and professional judgment. EyeDetect testing cannot replace the need for a thorough background investigation as part of a comprehensive pre-employment background investigation.

EyeDetect is a scientifically validated credibility assessment that detects deception in examinees by observing eye and reading behavior during a relatively short test. It has been validated by peer reviews and is highly reliable in detecting deception in screening and diagnostic applications.

The test aims to provide incremental validity to the investigation or decision-making process. Detecting deception is only part of any procedure.

EyeDetect is to be used as an aid or additional data point. It will not replace proper and thorough investigative efforts or in-depth background checks. Before employing it, reasonable efforts should be made to resolve any pending issues.

EyeDetect tests should be administered by certified Test Proctors. Each EyeDetect Test Proctor should be prepared to defend his or her competency in testing. Therefore, procedures must be carried out correctly.

All psychophysiological tests to detect deception have limitations and error rates. End users of any credibility assessment should have an appreciation for these error rates when considering how much weight to place on a test result. Additionally, the prior probability of guilt (base rate of deception) varies depending on the testing circumstances. EyeDetect test users should incorporate an approximation of the prior probability of guilt during test development and implementation. According to scientific literature, this is a best practice.

## ***Responsibilities***

### EyeDetect Test Proctor

- Conduct EyeDetect tests
  - Scheduling tests
  - Pre-test preparation of the examinee in the testing room
  - Test administration
  - Monitoring examinees during testing
  - Saving tests and uploading test data to the secure web server
- Ensure EyeDetect equipment is maintained in proper working order.

### Examinee Suitability

Not all examinees are suitable for EyeDetect testing. Test proctors can assist in assessing examinee suitability. Examinees must be physically, psychologically, and emotionally fit for testing. Data collected from an unfit examinee may be rejected by the EyeDetect algorithm.

Several factors may negate a person's suitability for testing. Among them are:

- Poor or low reading skills
- Eye disease that inhibits eyesight
- Limited comprehension or low intelligence
- Intoxication (alcohol or drug) while testing
- Excessive fatigue, where the examinee is unable to concentrate on test questions
- An exceptionally heightened emotional state resulting from involvement in a traumatic incident, especially if the incident was violent. Example: Victim of armed robbery being administered a test shortly after the alleged robbery, or member of the immediate family being tested soon after a family member's homicide.
- Following an interrogation. Note: The EyeDetect test should be conducted before any accusatory, interrogation, or in-depth interview.

## **Testing Guidelines**

The Test Proctor shall inform the examinee of the nature of the test, in general terms, and the examinee's participation is voluntary.

### *Juvenile Guidelines*

EyeDetect tests should be conducted on functionally mature individuals who can read, comprehend, and answer test questions. Thus, it is recommended that no one be tested younger than 12 years old. Tests conducted on anyone younger than 18 (or the age of consent in the jurisdiction) require parental or legal guardian consent. Additionally, if a child has been taken into custody (as a child), no testing may be administered without the consent of the child's attorney or the juvenile court judge.

### *Prisoner Testing*

An EyeDetect test may be conducted in any distraction-free setting unless there are extenuating circumstances, such as security, health conditions, or others. If these are present, an alternative testing location is suggested.

### *Screening of Job Applicants*

EyeDetect may be used to screen job applicants. Consumers should consult legal counsel regarding potential limitations imposed under local statutes. In the United States, this could include the Americans with Disabilities Act (ADA) and Employee Polygraph Protection Act (EPPA).

If approved by **ABC Police Agency** and based on policies regarding the use of personally identifiable information, the Test Proctor should record the examinee's name and any ID number within the EyeDetect software before administering the test.

### *Investigation*

EyeDetect tests may be used as an investigative tool. Prior to administering the test, the investigator should have conducted an in-depth interview with the prospective examinee to determine his/her knowledge of the facts of the case and gather any pertinent background information.

Test writers should work with investigators to ensure the test targets are apparent, concise aspects of the alleged event. The investigator should be available to the test writer during test development and, upon test completion, to conduct any post-test interviews.

## *Observers*

In all testing scenarios, to limit distractions, no one other than the examinee and Test Proctor should be present in the testing room during the test unless there are mitigating circumstances. If a third party must be present to observe the test, the following steps should be taken.

- The Test Proctor will meet with the potential observer alone.
- The Test Proctor will explain the procedures to be followed.
- The Test Proctor will broadcast the test to the observer in a separate room using EyeDetect Manager.

## *Recording of the Test (Video)*

The EyeDetect software can be configured to automatically video record the test for quality control purposes. All EyeDetect exams should be video recorded at a minimum.

## *Pre-Test Procedures*

Before conducting an EyeDetect test, a background investigator shall review all relevant job applicant documents, including personal history statements, pre-investigation questionnaires, and, if applicable, any previous EyeDetect test reports prepared by this agency.

The background investigator shall conduct a pre-test interview with the examinee to review the relevant job applicant documents.

- If the examinee reveals disqualifying information or behavior during the pre-test interview, it shall be recorded, and the examinee's testing will be postponed until the adjudicator reviews the case.
- If the examinee reveals information or behavior during the pre-test interview that is not disqualifying but changes the nature of test questions to those focused on withholding information, the Test Proctor will be informed to administer the appropriate EyeDetect test.

Before administering the test, the Test Proctor should have the examinee sign a Statement of Rights/Consent form and any other applicable forms or documents. The Test Proctor should then become acquainted with the examinee to determine whether s/he is suitable for testing. If the Test Proctor determines that the person is not suitable for testing, no test shall be conducted.

The Test Proctor shall explain the EyeDetect procedure to the candidate and prepare the candidate for the test.

## ***Test Procedures***

The Test Proctor should monitor the examinee during the test to ensure compliance with testing procedures. At times, examinees may attempt to apply countermeasures when responding to questions. Some countermeasures include shutting the eyes, squinting, looking away, non-response to questions, and random responses.

The EyeDetect Manager software allows the Test Proctor to monitor these conditions in real time.

## ***Test Report***

Upon test completion, the Test Proctor will sync the EyeDetect Station, which uploads testing data, including test responses, eye behavior, and eye measurements, to a secure web server. An algorithm analyzes the testing data, and a test report and score are usually available within less than five minutes.

Test reports and scores are only available on the EyeDetect Dashboard, which requires two-level authentication to access. Test results are displayed on the Dashboard screen. A summary of each test is provided, including the Subject Name, Test Date, and Test Score. Clicking on a test will load more information about the test.

## ***Test Scores or Outcomes***

EyeDetect results are straightforward. The following are the potential outcomes.

### Credible

A score of 50 or above for a relevant issue is considered “Credible.” Anyone scoring 50 or greater is considered to have passed the test.

### Not Credible

A score lower than 50 for a relevant issue is considered “Not Credible.” Anyone scoring 49 or lower is considered to have failed the test.

### Inconclusive

The “Inconclusive” category is only assigned to Directed Lie tests when the examinee scores between 41 and 59. This draws attention to the score and prompts the Test Proctor to conduct additional research or a post-test interview.

### Insufficient Data

If the test cannot be scored due to “Insufficient Data,” there are a few possible scenarios:

- During the test, the examinee was deceptive and used countermeasures such as looking away from the screen, blinking excessively, squinting frequently, or closing the eyes

during the test. If the examinee is uncooperative, we recommend considering the examinee as having failed the test.

- During the test, the examinee may have been cooperative, but the eye tracker may have had difficulty maintaining contact with the examinee’s eyes for one or more of the following reasons, which would have occurred during the test and assume the initial Telemetry/Calibration steps were successful:
  - There was excessive glare on the examinee’s glasses or frames or
  - There was excessive, or lack of, light in the testing room; or
  - The testing room lighting was significantly brighter on one side of the room than on the other side, or
  - The distance between the examinee and the eye tracker was incorrect, or
  - The examinee had an eye condition or disease such as:
    - droopy eyelids
    - excessive blinking
    - excessive squinting
    - blindness

#### Other “Not Credible” Outcomes

##### -Too Many Timeouts (High Number of Incomplete Questions)

The “incomplete responses” figure summarizes relevant, comparison, and neutral questions. If the examinee fails to respond quickly enough (time limit expired) on more than 32% of any of these three question types, the test will not score.

There are several possible scenarios for this behavior, including:

The examinee chose not to respond, possibly as a countermeasure. Sometimes, the examinee will respond to specific questions naturally but will choose not to respond to other questions (anticipating that a lack of data for comparison questions will alter the results). If an examinee intentionally fails to respond to questions quickly enough, s/he should be considered non-compliant. Non-compliance may be considered a test failure at the discretion of the person requesting the test.

A lack of timely responses may indicate that the examinee has poor comprehension of the questions or has poor reading skills. Examinees in this situation should not be tested. Note: If the Test Proctor has concerns about an examinee’s reading and comprehension skills, the test should not be administered as the examinee may be unsuitable.

The percentages of timed-out questions can sometimes determine reading comprehension for one type of question (relevant and comparison) versus another type (neutral). If the percentages are similar regardless of the question type, the examinee may be a poor reader or

do not understand the questions well enough to respond. If the percentages are different for one question type compared to another question type, the examinee may be applying a countermeasure and could be considered non-compliant

If the examinee had more difficulty with statements written in passive voice or as negations (double negatives) than with other test questions, this may indicate reading comprehension concerns. Difficulty with these questions is not uncommon, but poor readers or those with low levels of comprehension tend to answer negations more often incorrectly.

#### -Low Reading Comprehension (i.e., Examinee Fails the Reading Test)

If the examinee fails the Reading Test, the test will not be scored. If the examinee has a poor reading level or poor level of comprehension, test results may not be accurate. Test results for examinees in this situation should be set aside in an abundance of caution.

#### -Probable Confession

If the Credibility Score for the comparison issue is low (less than 90), the Credibility Score for the relevant issue is between 70-90, and there is a high percentage of incorrect responses to the relevant questions (such as 25-50%), the examinee may be indirectly confessing to participation in the relevant issue by responding incorrectly.

A high percentage of incorrect responses to the relevant question *may* imply that the examinee admits to participating in that behavior and is responding credibly. Given that the examinee is being truthful about their participation in the inappropriate activity, the relevant question(s) score(s) may be sufficiently high to indicate the examinee is credible. However, in this circumstance, the algorithm reports the examinee is credible in his admission to having done the behavior covered in the relevant question. For this reason, it is important to consider the EyeDetect results in the context of how the examinee answers.

Check the notes in the Information section of the examinee's test report to see if the Test Proctor recorded a confession.

#### -Random Responses

The average person incorrectly answers 11% to 15% of test questions.

- If the Credibility Scores for the relevant and comparison issues are in the credible range (above 50) but there are a high number of questions incorrectly answered (such as more than 30% or more), there are three possible explanations:
  - The examinee used a countermeasure by randomly responding to questions without concern for accuracy; if an examinee is uncooperative, it is recommended that they be considered to have failed the test due to non-compliance.



- The examinee has poor comprehension or reading skills. Examinees in this situation should not be tested. Such persons are not suitable candidates for testing. Examinees must have a minimum reading level.
  - Sometimes, reading comprehension can be determined by the percentage of incorrect questions for one type of question (relevant) versus another type (comparison or neutral). The examinee is likely a poor reader if the percentages are similar regardless of question type. If the percentages are significantly different for one question set and another, the examinee is either confessing or applying countermeasures by randomly responding to one set of the relevant issues and is considered non-compliant. For example, an examinee that incorrectly responds to 50% of the relevant questions and 10% of the comparison or neutral questions is probably applying a countermeasure because s/he clearly understands what is being asked for the relevant issue questions.
  - If the examinee had difficulty with statements that were passive voice or negations (double negatives) compared to other test questions, s/he may be a poor reader or have low comprehension.
  - The examinee is applying a countermeasure by not providing enough detail on comparison questions, such as answering many relevant/comparison questions as all True or all False.
- If the Credibility Score for the relevant issue is in the deceptive range (below 50) and a high number of relevant, comparison, or neutral questions are incorrectly answered (such as >25%), this is an indicator of deception despite the potential poor reading or comprehension level of that person. In other words, the examinee still received a deceptive score despite a lower number of questions understood.

#### Other Issues Affecting Test Scores

- If an examinee takes a test while under the influence of alcohol, drugs, or particular eye medications, the examinee's answers may be inconsistent, or the eye data could be dampened. In those cases, the results may become unreliable, or the algorithm may not be able to render a result.
- If the examinee takes the test in a language other than his/her native tongue, the results may be affected due to the increased cognitive load required when responding to complex questions in a non-native second language.
- If an examinee takes the same test during a short interval (same day), familiarity with the test questions may affect scoring.

#### ***Post-Test Procedures***

After the Test Proctor syncs the EyeDetect Station, all testing data are removed from the EyeDetect Station and transferred to a secure web server for scoring. An authorized person with proper login credentials may access the Dashboard to check test scores or reports.

Except when the Administrator approves, the Test Proctor should not have access to test scores. Therefore, according to department or agency policy, the hiring manager or investigator shall advise the examinee of the test results. When the results are given to the examinee, they are characterized as:

- Credible
- Not Credible
- Inconclusive
- Indeterminate due to data loss

If the examinee chooses to exercise the right to legal counsel or terminates the test prematurely, the circumstances of the termination should be documented.

#### Report

After uploading the test data to the secure web server, the test report is usually available in the dashboard in less than 5 minutes.

#### Post-test Interview

If the examinee fails the EyeDetect test but the background investigator determines that a post-test interview is warranted, it will be conducted immediately.

- If the examinee reveals disqualifying information or behavior during the post-test interview, it shall be recorded, and the adjudicator will review the case.
- If the examinee reveals information or behavior during the post-test interview that is not disqualifying, the background investigator shall consult with the Professional Standards Captain and Chief of Police. If a decision is made to administer a secondary EyeDetect test about a specific topic, the Test Proctor will be informed to administer the appropriate EyeDetect test, and the examinee will be re-tested following the same procedures previously outlined. Secondary EyeDetect testing under these circumstances may include carefully crafted questions with greater specificity about singular events or concerns. The test writer will be consulted to create the test.

#### Testing Techniques

EyeDetect offers two testing techniques: screening and single-issue (diagnostic).

The background investigator shall determine the testing protocol and test topics for the circumstances.

## Test Question Construction

Relevant questions must pertain directly to the target behaviors or matter under investigation for which the person is being tested. They must also be clear, concise, and non-accusatory. Question construction for screening tests is done in advance with feedback from the hiring manager. The investigator will be consulted for investigations.

Comparison questions must be similar in nature to the relevant questions.

Neutral questions are written as being unrelated to the issue being tested. Depending on the test protocol used, these questions may be simple math problems or general knowledge questions.

## ***Quality Control Procedures***

### Purpose

The quality control (QC) review of test development and administration aims to ensure proper test creation and administration. The review will include an analysis of test question construction and an overall review of test administration to ensure that procedures are followed and that test results are available and understood.

**NAME** or **DEPARTMENT** shall conduct periodic QC reviews of tests and Test Proctors.

### Benefits

The benefits of the previously discussed reviewing procedures are:

- To standardize techniques and reports
- To ensure test validity
- To decrease the use of countermeasures or indeterminate results
- To support the test results

### Testing Rooms

- Tests and interviews shall be conducted in a clean, well-lighted room free of audible and visual distractions.
- Walls shall be free of distractions in the line of sight of examinees during testing.
- Test Proctors will be neat, well-groomed, and dressed in a manner consistent with the standards of the professional business community. Duty uniforms, badges, and other emblems of authority should not be worn. This does not include departmental identification, where required. Service weapons may be worn but not openly displayed.

## Records Maintenance

All test reports will be maintained in the Dashboard by Converus indefinitely. Printed reports shall be maintained by the hiring manager for two years and by the investigator for 5 years or according to law. The Test Proctor will keep a log of tests conducted.

## Confidentiality of Test Results

Except as the Administrator approves, Test Proctors do not have access to test results. Hiring managers, investigators, and support staff may only disclose EyeDetect results and information to those individuals and organizations agreed to in writing by the examinee.

Upon written request, test results may be given to the person for whom the test is conducted or an employee of that person, or the organization that requested the test.

## APPENDICES

The following pages contain samples of the following forms:

- QC Review
- Rights and Statement of Consent

### Quality Control Review

Case # \_\_\_\_\_ Examiner \_\_\_\_\_

<u>YES</u>	<u>NO</u>	<u>N/A</u>	
_____	_____	_____	Request/Authorization
_____	_____	_____	Rights/Consent Form
_____	_____	_____	Relevant Questions
_____	_____	_____	Comparison Questions
_____	_____	_____	Telemetry
_____	_____	_____	EyeDetect Report

Comments:

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A technical review of the test prior to administration has been completed.

QC contact

\_\_\_\_\_ Date \_\_\_\_\_

Hiring manager or investigator

\_\_\_\_\_ Date \_\_\_\_\_

## Consent and Release of Test Results

The purpose of this test:

This test is being done at the request of

I authorize the release of the results of this test and/or post-test interview to

\_\_\_\_\_.

Your personal rights regarding taking a lie detector test include, but are not limited to;

1. *You have the right to refuse to take this test.*
2. *If you agree to take this test, you can stop the test at any time.*
3. *If you agree to take the test, you have the right to refuse to answer any individual question.*

I have read this statement of my rights and understand what my rights are. I understand and know what I am doing. No threats or promises have been used against me to obtain my consent to be tested or interview. I understand that the interview room *Does/Does Not* contain an observation device and that the procedure *Will/Will Not* be monitored and recorded.

I agree to release, indemnify, and forever hold harmless ORGANIZATION (its agents, employees, and/or designate) along with the company, agency, attorney, or person (s) requesting this test or anyone acting on their behalf from all claims and liability. This includes claims arising from negligence or breach of duty from either this interview and/or test, the reporting of the interview and/or test, and/or the method used to determine the test results.

\_\_\_\_\_  
Signature of person taking EyeDetect / Date

\_\_\_\_\_  
Witness/Date

\_\_\_\_\_  
Printed name of person taking EyeDetect