Full Scale AIQ — 111

The Full Scale AIQ score is calculated from 10 subtests, which are then grouped into four categories: Visual Spatial Processing, Reaction Time, Decision Making, and Learning Efficiency.

Visual Spatial Processing — 110

This factor measures visual perception and organization, simultaneous processing, visual memory, and spatial scanning. Ultimately, these tasks require athletes to mentally organize visual information efficiently and effectively.

Manipulation / Rotation	Navigation	Visual Retention	Spatial Awareness
102	100	117	122

Reaction Time — 88

This factor measures an athlete's speed in response to stimuli. It also assesses the ability to make snap judgments, detect differences, or compare information. These tasks require sustained attention, concentration, and mental control.

Reaction Time - Simple	Reaction Time - Distract
87	89
●●	●●●

●●●● Highly Accurate
●●● Accurate
●● Fairly Inaccurate
● Highly Inaccurate

Decision Making — 112

This factor measures the speed and accuracy of decision making over time.

Multiple Target Search	Target Comparison
111	112

Learning Efficiency — 134

This factor measures the ability to store information into long-term memory and then retrieve that information later.

Acquisition	Recall
138	130

Scoring Key

<85	85-94	95-104	105-114	115<
POOR	LOW AVG	AVG	HIGH AVG	SUPERIOR

Analysis

Player X's scores in the area of learning efficiency are truly exceptional and among the highest obtained to date. His visual retention was also very strong. The combination of these strengths suggest that Player X is likely to remember critical details about what he sees, and he can recall this information readily when needed. As a pitcher, these strengths may enable him to remember the precise location of a pitch he threw to a hitter in a previous at-bat or game, and what the outcome was. This way he can attempt to duplicate the results or avoid making the same mistake. Player X may also have a competitive advantage compared to other elite athletes when learning new strategies and techniques, as he will require less time and effort to digest this information.

Player X also displayed a significant strength in spatial awareness. As a pitcher, this may help him maintain appropriate mechanics during his delivery, because he can picture his body in space. A strength in this area may also allow him to understand issues related to arm angle, torque, grip, and rotation.

In the area of decision-making, Player X also achieved high scores. He did equally well with scanning a visual field for critical details and making quick and accurate two-option decisions. When pitching from the stretch with a baserunner on first, these strengths may help him detect increasing leads and determine when to throw to first or go to the plate.

The only weaknesses in Player X's profile were found on measures of reaction time. He performed comparably when he knew what he was looking for and when distractors were introduced. For baseball players, weaknesses in this area may affect the ability to differentiate hittable from unhittable pitches. As a pitcher this may be less critical, but these weaknesses may also affect his ability to react to a ball hit up the middle or a bunt down the 3rd baseline.

Recommendations

Given his remarkable strengths in learning efficiency and visual retention, Player X should be able to learn important information in practice and recall it when needed during games. For example, he may recall successful pitch sequences for specific hitters. He is also likely to grasp information faster than other elite athletes. Further, he may be able to see in his mind where he needs to place the ball, beyond looking at the catcher's mitt.

Player X's spatial awareness is also likely to be an asset, as he should be able to understand how both his body and the ball move in space. As a result, he should be able to make adjustments when the pitching coach or others note issues with mechanics.

If he can develop an adequate move to first or reasonable time of delivery to home, his strengths in decision-making may help him hold runners on base.

Player X's weaknesses in reaction time may come into play when fielding his position. If his coaches see an impact of these weaknesses, they may want to consider providing additional fielding practice or examining how his delivery affects his body positioning for fielding.

Visual Spatial Processing   110

This factor measures visual perception and organization, simultaneous processing, visual memory, and spatial scanning. Ultimately, these tasks require athletes to mentally organize visual information efficiently and effectively.

Visual Spatial Processing - Subtests

Manipulation/Rotation   102

(Shape Rotations)

Assesses the ability to visualize the field well, especially under altered conditions. A strength in manipulation/rotation might come into play when an athlete must adapt to his visual field changing as a play unfolds.

Navigation   100

(Route Finding)

Assesses the ability to scan a visual field quickly and effectively, and determine the shortest route to the destination. A strength in navigation may enable an athlete to quickly recognize obstacles and identify the best path.

Visual Retention   117

(Memory for Shapes)

Assesses the ability to form and store mental images and then recognize or recall them later. A strength in visual retention may enable an athlete to learn different offensive and defensive formations more efficiently. In addition, the athlete is likely to remember where other players are supposed to be on the field as plays are carried out.

Spatial Awareness   122

(Design Matching)

Assesses the ability to maintain orientation with respect to objects in space. A strength in spatial awareness may enable an athlete to keep a specific play in mind and maintain his positioning in relation to other players or landmarks.

Scoring Key				
<85	85-94	95-104	105-114	115<
POOR	LOW AVG	AVG	HIGH AVG	SUPERIOR

Reaction Time   88

This factor measures an athlete's speed in response to stimuli. It also assesses the ability to make snap judgments, detect differences, or compare information. These tasks require sustained attention, concentration, and mental control.

Reaction Time - Subtests

Reaction Time - Simple   87

(Simple Reaction Time)

●●

Assesses the ability to respond quickly and accurately to immediate stimuli. A strength in reaction time - simple may enable an athlete to get a jump on an opposing player.

Reaction Time - Distract   89

(Choice Reaction Time)

●●●

Assesses the ability to respond quickly and accurately to important stimuli while ignoring distractions. A strength in reaction time - distract may enable an athlete to remain focused on key information while ignoring extraneous factors.

●●●● Highly Accurate
●●● Accurate
●● Fairly Inaccurate
● Highly Inaccurate

Scoring Key				
<85	85-94	95-104	105-114	115<
POOR	LOW AVG	AVG	HIGH AVG	SUPERIOR

Decision Making   112

This factor measures the speed and accuracy of decision making over time.

Decision Making - Subtests

Multiple Target Search   111

(Object Scanning)

Assesses the ability to search for information rapidly in a visual field. A strength in this area would likely enable an athlete to quickly locate players or markers of interest.

Target Comparison   112

(Number Matching)

Assesses the ability to quickly compare information in a visual field. A strength in this area may allow a player to quickly decide what to do next, based on the actions of opposing players.

Scoring Key				
<85	**85-94**	**95-104**	**105-114**	**115<**
POOR	LOW AVG	AVG	HIGH AVG	SUPERIOR

Learning Efficiency   134

This factor measures the ability to store information into long-term memory and then retrieve that information later.

Learning Efficiency - Subtests

Acquisition   138

(Paired-Associative Learning)

Assesses the ability to store and recall information through association. A strength in this ability may enable an athlete to learn and recall plays efficiently and effectively, thus requiring less study time.

Recall   130

(Paired-Associative Learning - Delayed)

Assesses the ability to recall previously learned information quickly and accurately. A strength in this area may allow an athlete to retain previously learned plays well over time.

Scoring Key				
<85	85-94	95-104	105-114	115<
POOR	LOW AVG	AVG	HIGH AVG	SUPERIOR