RightEye — Sports Vision EyeQ™

AMATEUR SILVER — SCORE: 79

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My Skill Level: Amateur 17-28

Pyramid:
- ON-FIELD — Distractibility, Impulsivity
- MIND <=> EYE — Neuro-connections, Processing
- MECHANICS — Eye nerve and muscle coordination
- FUNCTIONAL — Acuity, Stability, Contrast
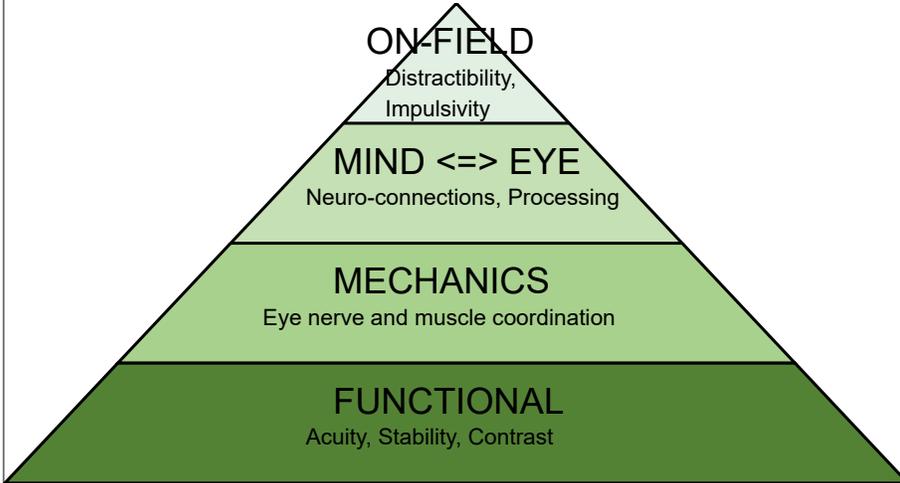
My Medal / My Level

	My Score	Percentile	Amateur 17-28	Top 1%
AMATEUR GOLD	88	90	90	100
AMATEUR SILVER	69	80	76	100
AMATEUR GOLD	83	93	76	89
AMATEUR SILVER	76	72	80	100

Vision Measurements	My Eyes	Healthy Level	May Help Reduce the Risk of
Blink Rate (sec)	8.72	≥ 0.88	eye discomfort, eye redness
Extended Blinks	1	≤ 2	eye fatigue, tired eyes, eye strain
Binocular Vision	Central	Central	spatial and temporal abilities e.g. catching a ball

Stability

Right Eye | Left Eye

RIGHT EYE	
≤ 2º : 99.94%	
2º and ≤ 4º : 0.06%	
> 4º : 0.00%	
LEFT EYE	
≤ 2º : 98.94%	
2º and ≤ 4º : 1.06%	
> 4º : 0.00%	

Horizontal Tracking

Right Eye / Left Eye

RIGHT EYE	
SP (R) % : 93.89	
LEFT EYE	
SP (L) % : 91.24	

Horizontal Speed & Targeting

Right Eye / Left Eye

RIGHT EYE	
TA (mm): 9.14	
SPEED (d/s): 95.60	
LEFT EYE	
TA (mm): 9.31	
SPEED (d/s): 96.57	

Disparity / Vertical Tracking / Speed & Targeting

	Right Eye	Left Eye	Right Eye	Left Eye	Right Eye	Left Eye

DEPTH(mm)	-40.60	SP (R) %	99.69	TA (R) mm	10.50
		SP (L) %	98.52	TA (L) mm	10.56

KEY: % = Percentage, º = Degree, d/s = Degrees per second, SP = Smooth Pursuit, TA = Targeting Accuracy, L = Left, R = Right, mm = Millimeters, cm = Centimeters

Disclaimer

The RightEye Vision System is designed to provide information based on involuntary eye movements associated with sports.

The RightEye Vision System cannot replace your evaluation. Nor can the RightEye Vision be used to provide an uninterpreted diagnosis or direct treatment recommendations.

Your average distance from the screen was 57 cm (56 - 59 cm) recommended distance is 55-60 cm.

Guidelines

RightEye Sports Vision EyeQ Score:

Measures individual score, against peers. This is a weighted score developed by leading optometrists, coaches, and sport vision experts. This score is based on athletic performance needs. A higher number is better. A perfect score is 100.

The RightEye Sports Vision Pyramid includes various areas of vision that impact your performance. The four components are inter-dependent. For instance, having poor functional skills may also affect aspects higher up in the pyramid. Percentiles are given for each level of the pyramid as well as the overall weighted percentile, the RightEye Sport Vision EyeQ Score. Percentiles show where you stand compared to your peers. 50th percentile means you scored better than 50 out of every 100 athletes at your designated skill level. A higher percentile is better.

Functional refers to the ability to have basic, fundamental visual health and functionality, including:

• **Static (Visual) Acuity:** is the ability to see stationary objects clearly (20/20), such as reading a play book. A lower number is better.

• **Dynamic (Visual) Acuity:** is the ability to see moving objects (object size fixed) clearly, such as tracking a ball, or reading hand signals. A higher speed (mph) is better.

• **Contrast Sensitivity:** is a very important measure of visual function, especially in situations of low light, fog, or glare (e.g. the sun), when the contrast between, for example the white ball and the grey clouds is reduced. A low ability in contrast may affect a performance on cloudy days or in night games. Scores range from 2-8. A higher number is better.

• **Fixation Stability:** is the ability to keep the eyes stable and fixed on a certain spot for a period of seconds. A higher percentage within a 2 degree bandwidth is best.

• **Blink Rate:** is associated in scientific research with dry eyes, visual clarity and fatigue. Blink rate of greater than 1.6 is considered normal.
- Reference (Ousler, G., Abelson, M. B., Johnston, P. R., Rodriguez, J., Lane, K., & Smith, L. M. (2014). Blink patterns and lid-contact times in dry-eye and normal subjects. OPTH Clinical Ophthalmology, 869-874.) (https://pdfs.semanticscholar.org/e3da/0e02846bd91ff2733dacac516e927c857f2e.pdf)

• **Extended Blinks:** refers to eye closure of greater than 1 second. Long closures of the eye are shown in scientific research to relate to tired eyes, visual fatigue. Ideally, less than 2 extended blinks are the best result.
- Reference (Rodriguez, J., Ousler, G., Johnston, P., Lane, K., & Abelson, M. (2013). Investigation of extended blinks and interblink intervals in subjects with and without dry eye. OPTH Clinical Ophthalmology, 337-342.) (https://pdfs.semanticscholar.org/2bb6/f4c7f9d2fe10dba7a0fc5fc8a234737352e8.pdf)

• **Binocular Vision:** refers to whether your eyes are "teaming" or working well together. 'Central' is best result.
- Reference (Coubard, O.A. (2015). Neurovision: Neural bases of binocular vision and coordination and their implications in visual training programs. Frontiers in Integrative Neuroscience, DOI 10.3389/978-2-88919-655-5.) (https://pdfs.semanticscholar.org/e7e3/194c5d2dd9e8a9a42c607c822bc38666b8e6.pdf)

• **Depth:** refers to the point at which the eyes converge compared to the point of focus. A negative number means the point of convergence is further than the required focus point. A positive score means the point of convergence is closer than the required focus point. Zero is a perfect score.

Mechanics refers to the eyes teaming together and muscle and nerve coordination to maintain effective and efficient use of the eyes, including:

• **Tracking ability (SP%):** refers to the ability of both eyes working together to follow an object such as a ball. A higher number is better.

• **Latency:** refers to the amount of time it takes the eyes to react when a target is presented. Like reacting to a starter gun with physical movement of your legs, but in this case, we are referring to your eye movement. A lower number is better.

• **Efficiency:** refers to the path your eyes take from one target to the other. Like running bases in baseball, are you taking the most efficient pathway or are you taking extra steps or distance which can increase the time it takes to get to your next visual target. A lower number is better.

• **Targeting Accuracy (TA):** refers to the accuracy between the target and where your eye hits. Value represents how far off the gaze is from target. A lower number is better.

• **Speed:** refers to the velocity of your eyes. A higher number paired with a low number in targeting is better.

• **Speed Accuracy Trade-off:** refers to the trade-off that occurs between moving your eyes quickly but also being accurate. Depending on the sport, you may need one more than the other, or both equally.

• **Recovery:** refers to the difference between gaze paths when eyes try to move away from one target to look at another target. This is indicative of the adjustment required by the eyes to stay on a visual line path which can cause increased response time. A lower number is better.

• **Variance:** refers to the variability or dispersion when trying to move eye gaze between targets. This is indicative of inconsistent eye gaze when changing focus between targets which can reduce the accuracy with certain activities in sports. A lower number is better.

Mind-Eye refers to the interplay of vision and neuro-connectivity to include visual processing, including:

• **Processing time:** refers to the time it takes to "think" once something is seen. A lower number is better.

• **Decision making accuracy:** refers to the outcome of the thought and whether your response was correct or incorrect. A higher number is better.

• **Reaction time:** refers to how quickly you responded to the task. A lower number is better.

On-Field refers to how environmental factors can influence performance including vision via motor responses, including:

• **Distractibility:** refers to your ability to pay attention to the task at hand. A lower number is better.

• **Impulsivity:** refers to your ability to be "patient", waiting for the information to present itself before responding. A lower number is better.

NOTE: ALL aspects measured above can be modified either by vision training or other optometric methods e.g. glasses, eye drops.