

## Test Results and Reports

### **ANSI Z87.1-2010**

American National Standard  
for Occupational and  
Educational  
Personal Eye and Face  
Protection Devices

**Model(s) : FCR3**



*Authorized signature*



Invalid if not stamped

### 5.1.1 Optical quality

Requirement	Test Results	Acceptance
Lenses shall be free of striae, bubbles, waves and other visible defects which would impair their optical quality.	Acceptable	Pass

### 5.1.2 Transmission

Requirement	Test Results	Acceptance
Type : R3 Luminous : 18.0 % ~ 8.5% IR : $\leq$ 9 %	Luminous: 11.425 % IR: 5.544 %	Pass

### 5.1.3 Haze

Requirement	Test Results	Acceptance
$\leq$ 3 %	0.7 %	Pass

### 5.1.4 Refractive power, Astigmatism, Resolving power

Requirement	Test Results	Acceptance
Refractive power : $\pm 0.06$ D	0.0035 D	Pass
Astigmatism : $\leq 0.06$ D	0.003 D	Pass
Resolving power : Pattern 20	Pattern 20	Pass

### 5.1.4 Prism and Prism Imbalance

Requirement	Test Results	Acceptance
Prism : $\leq 0.37 \Delta$ Vertical Imbalance : $\leq 0.37 \Delta$ Base In Imbalance : $\leq 0.125 \Delta$ Base Out Imbalance : $\leq 0.75 \Delta$	Prism : $0.1 \Delta$ Vertical Imbalance : $0 \Delta$ Base In Imbalance : N/A Base Out Imbalance : $0.1 \Delta$	Pass

### 5.2.1 Drop ball impact resistance

Requirement	Test Results	Acceptance
Shall not fracture	Acceptable	Pass

### 5.2.3 Ignition

Requirement	Test Results	Acceptance
Shall not ignite or continue to glow	Acceptable	Pass

### 5.2.4 Corrosion resistance

Requirement	Test Results	Acceptance
Metal components shall be corrosion resistant to the degree that the function of the protector shall not be impaired by corrosion	Acceptable	Pass

### 5.2.5 Minimum coverage area

Requirement	Test Results	Acceptance
Not less than 40 mm in width and 33 mm in height in front of each eye	Acceptable	Pass

### 6.1.3 Lateral protection

Requirement	Test Results	Acceptance
Shall provide continuous lateral coverage from the vertical plane of the lenses tangential to a point not less than 10 mm posterior to the corneal plane and not less than 10 mm in height above and not less than 10 mm in height below the horizontal plane centered on the eyes.	Acceptable	Pass

### 6.2.2 High mass impact

Requirement	Test Results	Acceptance
Left eye 1	Acceptable	Pass
Left eye 2	Acceptable	
Right eye 1	Acceptable	
Right eye 2	Acceptable	

### 6.2.3 High speed impact

Requirement	Test Results	Acceptance
Left eye – 0 degree	Acceptable	Pass
Left eye – 30 degrees temporal	Acceptable	
Left eye – 90 degrees temporal	Acceptable	
Right eye – 0 degree	Acceptable	
Right eye – 30 degrees temporal	Acceptable	
Right eye – 90 degrees temporal	Acceptable	

### 6.2.3 Penetration test

Requirement	Test Results	Acceptance
Left eye 1	Acceptable	Pass
Left eye 2	Acceptable	
Right eye 1	Acceptable	
Right eye 2	Acceptable	