RAM® Solo

Predictions are 95% Accurate within
2 lines of Letters.

Clinically Proven

~PREDICT WITH CONFIDENCE~

71 Reviewers Agree

RETINAL ACUITY METER
Is the Best

IMPROVED PATIENT CARE: YES	100%
IMPROVED INFORMED CONSENT: YES	100%
IMPROVED SURGICAL CASES SELECTION: YES	100%
IDENTIFIED GOOD SURGICAL CASES CONSIDERED TO HAVE POOR PROGNOSIS: YES	92%
CHANGED MY PRACTICE PATTERN: YES	100%

AMA OPTICS INCORPORATED

AMA Optics, Inc.
11 Island Ave. Suite 1001
Miami Beach, FL 33139
1-877-744-EYES (3937)
305-321-7855
www.amaoptics.com
www.visionperformance.store

Why use RAM® and How does it work

The RAM® removes uncertainties about the outcome for doctors and patients. Importantly, the RAM will prevent unexpected unpleasant post-op surprises due to pre-existing disease not discovered on the complete eye exam or by OCT.

The RAM® is used in conjunction with a (1) AMA Optics multi-perforated pinhole clip, (2) full distance refraction plus near vision correction and (3) 16 inch examining distance (precise letter size and cord). The multiple pinholes allow the patient to find the clearest visual opening in the cataract or posterior capsule for aligning the vision chart and the best part of the retina.

The ability of the RAM® to measure retinal acuity in the presence of media opacity and co-morbid retinal disease depends upon three optical principles:1. Pinhole resolution plus near correction

1. The pinhole aperture places the eye in *almost* universal focus and reduces visual aberrations. The 2.5 diopters near-lens focuses the eye precisely at 16 inches and maximizes acuity at 16 inches.
2. Correct visual angle

The letters, numbers, or symbols are sized to be equivalent to the visual angle of Snellen letters at 20 feet.

3. Bright and uniform calibrated retro-illumination--

The bright illumination compensates for light attenuated by cataract and corneal opacities. Acuity measured at distance (20 feet) is at low illumination (85 cd/m2) while the RAM chart held at 16 inches is at very high illumination, 3000 cd/m^2 or more. The denser the cataract, the brighter light is needed to penetrate the cataract.

- Avoid Light Exposure Prior To Testing,

Testing Retinal Acuity to measure Potential Vision

Pre-Test check list

- Test in a semi darkened room.
- Do not examine the retina with a bright light within 5 minutes of retinal acuity testing.
- Dilating the pupil is not necessary
  The dark Carrier Frames reduce ambient light and encourages the pupil to dilate.

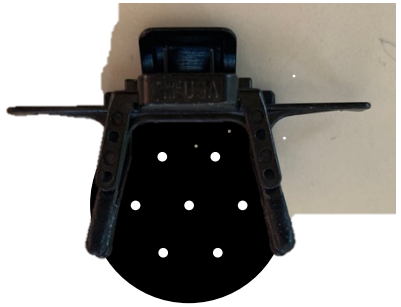
Testing protocol

Instruction video: www.visionperformance.store (select YouTube videos/RAM Exam Demo)

- Patient should wear their distance glasses or bifocals
- Place Carrier Frames over patient's glasses
  (The pinhole lens clips may be attached to the patient's glasses rather than the Carrier Frames)
- Insert magnetic occluding disc beneath the lens of the Pinhole Lens Clip
- The lens of Pinhole Lens Clip should be in the down position so that the patient is viewing through the lens. (lens up only if patient is wearing reading glasses)
- Position the RAM: Fully extend the cord to touch the patient's forehead. Hold that position while testing. Periodically re-measure to confirm the correct working distance.

- Start with the 20/200 letters and progress to the smallest letters.
- Instruct the patient to find the chart through one of the pinholes and read the line of letters. Inform the patient that some of the pinholes will provide a better view of the letters than other pinholes.
- Ask the patient to explore different pinholes to find the clearest view.
- Challenge the patient to read smaller letters because some letters are more readable, particularly if there is a small scotoma in the macula. For example, if 20/60-2 is achieved, the 20/50 and 20/40 lines should be presented, and even smaller if any of the smaller letters are seen correctly.
- Record the best achieved acuity.

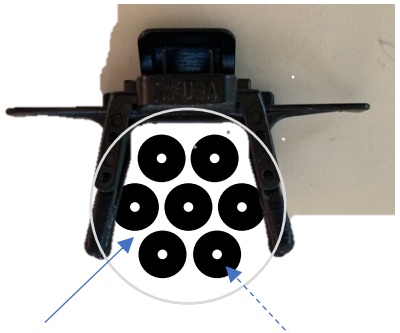
Standard Pinhole Lens Clip



* Panoramic Pinhole Lens Clip (Optional)

The Panoramic pinhole disc has black rings around the pinholes and clear regions between the pinholes. The patient views their current vision in the region between the pinholes and their potential vision through the pinhole. This allows the patient to directly and immediately compare (1) their current acuity to (2) the acuity they can expect after cataract surgery. Normal: Better acuity between the pinholes. Abnormal: Better vision through the pinhole. Abnormal conditions include cataract, corneal opacities, capsular opacities, & mal-refraction.

Panoramic Pinhole Lens Clip



Between sees Current Vision

Pinhole sees Potential Vision

Allows Side-by-Side Comparison

Packing List:
1.RAM® Solo
2.Carrier Frames
3.Pinhole Lens Clip with +2.5 D lens, 2 ea.
4.Occluding Disc
5.Charger
6.Lens Cloth
7.Case

Specification
Scale 20/200 to 20/20
Choice of chart: Letters, Numbers, Landolt C
Brightness: ~3000 cd/m^2 at 7.6 volts
Cord length: 16 inches
Battery: 9 volt Ni MH rechargeable
Digital Voltmeter
Shipping Weight; 2 lbs.

U.S. Patent No. 5,398,085
U.S. Trademark No. 2,776,911

Why use RAM® and How does it work

The RAM® removes uncertainties about the outcome for doctors and patients. Importantly, the RAM will prevent unexpected unpleasant post-op surprises due to pre-existing disease not discovered on the complete eye exam or by OCT.

The RAM® is used in conjunction with a (1) AMA Optics multi-perforated pinhole clip, (2) full distance refraction plus near vision correction and (3) 16 inch examining distance (precise letter size and cord). The multiple pinholes allow the patient to find the clearest visual opening in the cataract or posterior capsule for aligning the vision chart and the best part of the retina.

The ability of the RAM® to measure retinal acuity in the presence of media opacity and co-morbid retinal disease depends upon three optical principles:1. Pinhole resolution plus near correction

1. The pinhole aperture places the eye in *almost* universal focus and reduces visual aberrations. The 2.5 diopters near-lens focuses the eye precisely at 16 inches and maximizes acuity at 16 inches.
2. Correct visual angle

The letters, numbers, or symbols are sized to be equivalent to the visual angle of Snellen letters at 20 feet.

3. Bright and uniform calibrated retro-illumination--

The bright illumination compensates for light attenuated by cataract and corneal opacities. Acuity measured at distance (20 feet) is at low illumination (85 cd/m2) while the RAM chart held at 16 inches is at very high illumination, 3000 cd/m^2 or more. The denser the cataract, the brighter light is needed to penetrate the cataract.

Packing List:

1.RAM® Solo
2.Carrier Frames
3.Pinhole Lens Clip with +2.5 D lens, 2 ea.
4.Occluding Disc
5.Charger
6.Lens Cloth
7.Case

Specification

Scale 20/200 to 20/20
Choice of chart: Letters, Numbers, Landolt C
Brightness: ~3000 cd/m^2 at 7.6 volts
Cord length: 16 inches
Battery: 9 volt Ni MH rechargeable
Digital Voltmeter
Shipping Weight; 2 lbs.

U.S. Patent No. 5,398,085
U.S. Trademark No. 2,776,911