

ATB - DISTANT VISUAL ACUITY TESTING

(DD Form 2808, Block 61. 'DISTANT VISION') [As of: 1 May 2002]

Purpose/Indications: Distant vision.

Mandatory for all classes of FDME. This measures the best visual acuity at distance (20 feet or 6 meters) **WITHOUT** any kind of correction whatsoever, followed by best-corrected visual acuity at distance **WITH** spectacle prescription (if the patient wears any). **NO** contact lenses allowed during testing and must be removed at least 24 hours prior to examination.

This measures the clarity of vision or the ability of the visual system to resolve detail at distance. A patient's visual acuity at distance depends upon the accuracy of retinal focus, the integrity of the eye's neural elements, and the interpretive faculty of the brain.

It is important to conduct distant visual acuity testing on all patients before near acuity testing. Testing for near visual acuity before distant visual acuity may disadvantage the patient, depending on accommodative (focusing) ability.

Equipment:

Standard **PROJECTED** Snellen Distance Acuity Chart

[IAW AR 40-501, para 4-12. a.(1)]

Occluder (to cover one eye at a time)

-or- AFVT (Armed Forces Vision Tester) or the OPTEC 2300
[both considered projected systems]

Set-up:

Projected Snellen Distance Acuity Chart:

- Patient is 20 feet (or 6 meters) from acuity chart with center of chart at approximately eye-level for patient (intention is not to have any extreme angle between the patient and the chart).
- Patient holds occluder and covers eye as directed by tester. Patient may use palm of hand, if necessary, but ensure patient is using the palm, not the fingers, to preclude seeing between the fingers. Patient must keep both eyes open, must not press on either eye, and must not squint.

AFVT or OPTEC 2300:

- Patient is seated comfortably at the AFVT or OPTEC 2300.
- Far letter acuity slide(s) set correctly (see manual).
- Patient must push forehead against bar for internal light to work.

Step-By-Step Procedure.

Uncorrected Distant Vision:

- TEST UNCORRECTED VISUAL ACUITY FIRST! (This is important because a patient may be able to memorize the letters on the chart with corrected vision and, intentionally or unintentionally, say aloud the smaller letters on the chart when uncorrected, whether or not actually seen by the patient.)
- Observe the patient during testing to ensure no squinting (or at least attempt to observe the patient behind the AFVT/OPTEC 2300).
- Instruct the patient to cover one eye (or occlude the non-tested eye with the appropriate buttons on the AFVT/OPTEC 2300) and direct patient not to squint. By convention, it is best to test the right eye first, then left eye for consistency.

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| <ul style="list-style-type: none">- IMPORTANT NOTE ABOUT 20/20 DISTANT VISUAL ACUITY STANDARD FOR FDMEs! Per AR 40-501, paragraph 4-12, a (1), ”...no more than 1 error per 5 presentations of 20/20 letters, in any combination, on either the Armed Forces Vision Tester (AFVT) or any projected Snellen chart set for 20 feet.”- Issue: AFVT line has 10 letters but is split into two sets of five letters positioned next to each other on the same line. You may still test the entire line, if desired, but the patient is still only required to get 4 out of 5 letters that are on a 20/20 line to be considered a ‘pass’ for an FDME. Therefore, entries of 20/20 or 20/20⁻¹ are both passing entries. Most projected Snellen charts have 6 letters (some have 4, 5, 7, or 8 letters) per line. The regulation allows for presentation of 5 letters “in any combination” so you may meet the requirement. If in question, refer to the Eye Clinic for verification. |
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- Instruct the patient to, “read the smallest line of letters you can, without squinting” (or words to that effect).
 - If the patient reads at least 4 or 5 out of 5 letters on a 20/20 line, record 20/20⁻¹ or 20/20 for that eye, whichever is applicable. Repeat testing for other eye.
 - If the patient misses two letters or more out of 5 letters on a 20/20 line, ask patient to read the next larger line of letters; continue this process until patient reads at least 4 out of 5 letters on a line of letters. Then, encourage the patient to read any letters on the next smallest line if they can. Record visual acuity based on standard methods. Repeat testing for other eye.

- For example, if patient reads the entire 20/30 line easily, but can only read two of the letters on the 20/25 line, then record the visual acuity as 20/30⁺².

REFERRAL CRITERIA – Uncorrected Distant Vision:

- Class 1/1A FDME – refer if either eye is worse than 20/50 uncorrected.
- All other classes of FDME – refer if either eye is worse than 20/400 uncorrected.

Corrected Distance Vision:

- TEST CORRECTED VISUAL ACUITY AFTER UNCORRECTED.
- For Class 1/1A FDME, perform the visual acuity WITH spectacle prescription (if wears any) before instilling any drops for the cycloplegic refraction (under separate ATB) to ensure current spectacle prescription is adequate. If patient is not corrected to 20/20 (or 20/20⁻¹), it is advisable to have the Eye Clinic refract the patient to ensure he/she is correctable to standard before the cycloplegic refraction. However, do not record these results in block 61 since all Class 1/1A FDMEs will receive a cycloplegic refraction by an Optometrist or Ophthalmologist who will enter the patient's cycloplegic refraction acuity there. Therefore, you may record the results in block 60 or block 73, if desired, but ensure these results to not get confused with the cycloplegic results! Leave the 'Corr. to 20/___' in block 61 blank if Class 1/1A FDME.
- For all other classes of FDME, repeat the distant visual acuity procedure for the right eye WITH distance spectacle correction if patient wears any (NO contact lenses!). Patient should be wearing the glasses he/she uses with aviation duties. For bifocal wearers, be certain patient is looking through the distance portion of the spectacles. For progressive bifocal wearers, also ensure patient is angled correctly for optimal visual acuity. Ensure the spectacles worn are not a "reading only" prescription before proceeding with distant visual acuity testing. If patient was at least 20/20⁻¹ at distance without correction, this test can be skipped and a horizontal line drawn next to "Corr. to 20/--".
- Repeat procedure for the left eye for corrected distant visual acuity.

REFERRAL CRITERIA- Corrected Distant Vision:

- Class 1/1A FDME – must see Optometrist or Ophthalmologist for cycloplegic refraction.
- All other classes of FDME – refer if either eye is worse than 20/20⁻¹ with correction.