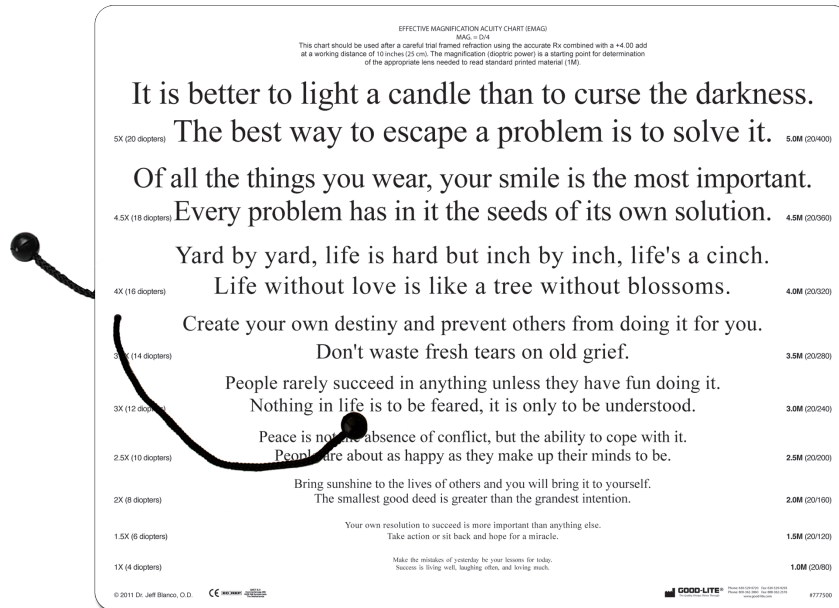


# Effective Magnification Acuity Chart

Part Number: 777500



## Introduction to the EMAG Chart

The science of low vision has many different levels, from the basic to the complex. The complexities of low vision deal with long math formulas that relate to unusual optical situations, telescopes, computer assistive technology, electronic magnification, rehabilitation of peripheral field defects, diseases affecting vision, the psychology of vision loss, psychosocial implications of vision impairment, and vision rehabilitation, to name a few.

Unfortunately, majority of practicing optometrists fail to incorporate even a basic level of low vision care into their practices.

The following information utilizing the EMAG chart by GOOD-LITE provides a simple method for determining the appropriate magnification for a low vision patient to be able to read standard printed material using spectacles and/or hand magnifiers. This can be the starting point for every optometrist to incorporate low vision into their practices. And let me also say that for the majority of low vision patients, those patients falling between 20/40 and 20/200, spectacles utilizing higher plus prescriptions and/or hand magnifiers are the main tools necessary for the beginning of vision rehabilitation.

I do not want to minimize the importance of the more complex aspects of low vision because it is a field, as mentioned above, that has levels of complexity. But as has been said before, every journey begins with the first step. The EMAG chart and the Blanco Method can be that first step.

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## The Blanco Method

1. Do a careful trial frame refraction.
2. Add a +4.00 diopter lens to your distance refraction and ask the patient to read the EMAG acuity chart.
3. Whatever the M acuity measurement is, multiply that times 4 to determine your starting dioptric power for reading standard size printed material.

Example: A patient is able to read 3M with the +4.00 diopter add at 10 inches. Multiply the M acuity times 4 ( $3 \times 4 = 12$ ) to determine your starting point, in diopters, which would be 12 diopters, to read standard size reading material.

You do not even have to do the above math because the EMAG Chart has the **starting dioptric power needed** on the left side of the line the patient read with the +4.00 add.

Remember, this is the starting point and it may under correct the patient slightly, but it is a good starting point. You can go stronger if necessary.

Another advantage in using this method is since your initial testing distance is 10 inches, you can use the Effective Magnification Formula which says, Diopters  $\div$  4 = Mag. Therefore, 12 diopters is equivalent to 3x. This eliminates the need to use several other, more complex low vision formulas.

Note: Since different manufacturers of magnification devices use different formulas, it is probably better to work in diopters rather than in "X".