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FORESEEING ALL YOUR OPHTHALMIC & OPTICAL EQUIPMENT NEEDS

Flood-BAM (F-BAM) Glare Test



[For price please contact us](#)

Flood-BAM (F-BAM) Glare Test

Flood lighting light source

- Identifies and Quantifies Glare Disability
- Document the glare disability in your record
- Open the Option for Early Surgical Intervention and Quality of Life Improvement

Brightness Acuity Meter (BAM) Triple Function Glare Tester

1. Glare
2. Photostress
3. Entopic Phenomenon (Flying Corpuscles)



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GLARE TEST

Illumination sources can adversely reduce visual acuity by degrading image resolution when light scattering eye conditions exist. The effect of glare on visual acuity is measured with the BAM™.

High contrast or graded contrast images may be used as test targets. Standard lighting brightness of the test targets is recommended (85 cd/m²).

The BAM™ brightness and acuity levels can be tailored to meet the needs of the examiner. Several brightness levels can be tested or testing can be limited to one brightness.

Conditions where glare adversely affects acuity:

- ▣ Corneal opacities or corneal edema
- ▣ Cataract, particularly posterior sub-capsular opacities
- ▣ Clouding of the posterior lens capsule
- ▣ Opacities in the vitreous
- ▣ Scratched or dirty glasses or contact lenses

F-BAM is primarily a glare tester, however, due to the lighting parameters, macular photostress and the entoptic phenomenon of flying corpuscles can be tested.

The diffuse lighting for the Flood BAM is similar in principle to the hand-held Brightness Acuity Test (BAT)¹ manufactured by MARCO Ophthalmic, Inc.. Flood lighting mimics bright outdoors lighting and light diffusion through a picture window.

The F-BAM provides an alternative to the BAT for those clinicians accustomed to diffuse background glare testing. Like the BAT, the F-BAM has three levels of background illumination in a hemispheric bowl that is held close to the eye. As a result, one possible source of error is pupil constriction by the illuminator; certain patients with cataract perform better with pupil constriction, thereby giving a false-negative test². Conversely, the third level (brightest) is dazzling, inducing false-positive results².

1. Holliday, Trujillo, & Ruiz. Brightness Acuity Meter (BAT) and outdoor visual acuity in cataract patients. J Cataract and Refractive Surgery, Jan 1987, 67-69.

2. Atlas of Cataract Surgery, Chap. 1, p2 by Samuel Masket.



MACULAR PHOTOSTRESS TESTS (F-BAM)

The brightness of the F-BAM provides for macular photostress testing when brightness is set on high and the bowl port is occluded. The BAM™ serves as saturating light source. After light exposure of the macula there is a normal delay period for visual recovery. In certain diseases² of the macula the refractory period is prolonged. Blocking the optical portal of the glare bowl changes the glare bowl into a photostress enclosure. With the plug in place, viewing brightness is ~600 Ft. Lamberts.

Entoptic Flying Corpuscles Phenomenon (F-BAM)

The blue-field entoptic phenomenon can be seen best by having the subject look into light with a narrow optical spectrum centered at a wavelength of 430 nm. Under such conditions, bright corpuscles are observed flying around the subject's fovea. Most likely, this phenomenon is caused by the fact that red, but not white, blood cells absorb short-wavelength light. Leukocyte movement underlies the blue-field entoptic phenomenon³. This entoptic phenomenon has been shown to predict macular function in eyes with vitreous hemorrhage⁴ and cataract⁵. The LED bulb of the BAM™ has a peak near 440 nm and explains the prominence of this phenomenon while viewing the BAM™.