

# Dark Adaptometry

## Upgrade Module

The Dark Adaptometry module uses the ColorDome™ or ColorFlash™ stimulator to perform a full or partial field dark adaptation to accurately measure retinal parameters such as cone sensitivity, rod sensitivity and the rod-cone break point.

The dark adaptometry test may be run for single or dual eye measurements or a combination. Protocols include the *Marmor Test* as well as a wide array of options for research and clinical use. The test detects cone and rod threshold as well as rhodopsin regeneration rates in fields of view from 12° to full-field.

The patient's eyes are displayed during testing in the Espion™ software and the results of multiple tests can be displayed in a single analysis plot.

## Features

- Simple to perform, fast measure of thresholds
- Range of test field sizes
- Full adaptation or endpoint testing
- Allows monocular or binocular testing with RGB or white colors
- Infrared camera is used to monitor the patient
- Automatically marked thresholds for rod, cone and other key metrics
- Single button box connects directly to ColorDome for user input
- White flash intensity from below the scotopic threshold up to 60 cd·s/m<sup>2</sup> (2,500 cd·s/m<sup>2</sup> when using a ColorDome with xenon flash)



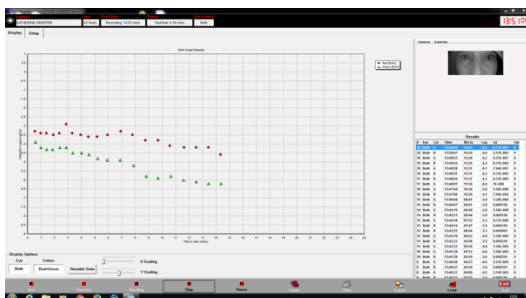
*ColorDome shown mounted on Profile System cart*

## Applications

- Rod and cone dystrophies affecting sensitivities
- Age-related macular degeneration (AMD)
- Retinitis pigmentosa
- Vitamin A deficiency
- CSNB



*iMask™ shown mounted on ColorDome*



**Test in Progress:** software displays details of the sensitivity as the protocol runs

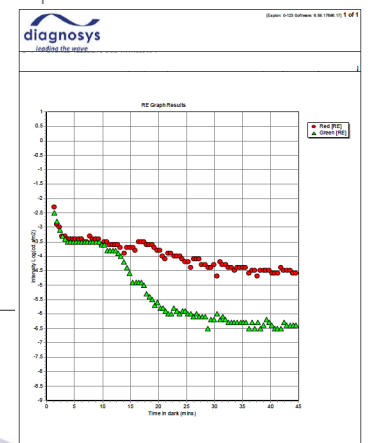
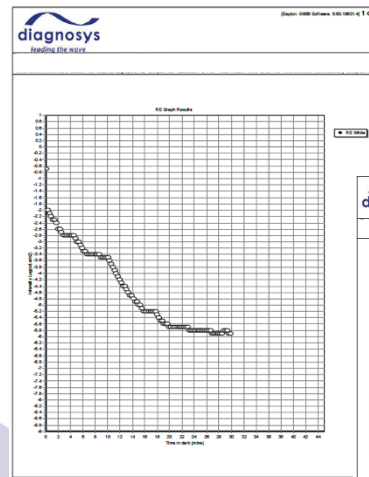
## The Marmor Test

Developed in partnership with Dr Michael Marmor at Stanford University, the *Marmor Test* has been developed and validated through testing at Stanford and Diagnosys over the past 4 years. The test replicates and improves upon that which has been used for decades and was the traditional gold standard for DA testing: the Goldmann-Weekers DA test from Haag-Streit. The *Marmor Test* utilizes white stimuli, a 50° field of view, optimized protocol settings for high test accuracy, attributes for patient comfort, and considerations for practical clinical use. Versions include protocols for cone/rod thresholds as well as endpoint rod thresholds.

## Wide test capabilities:

- Variable bleach intensities and times
- Programmable delay and sounds
- Colors are user specified: white, red, green, blue
- Programmable flash parameters for varying test protocols
- iMask (for most accurate DA measurements):
  - Defined test spots: 12° (perifovea), 22° (macula), 32° (traditional), 50° (standard)
  - Defined bleach field: 32°, 50°, full-field
  - Check each eye dynamically during test
  - iMask eye shields block stray light

## Example test reports:



## Dark Adaptometry module includes

Patient response button box, protocols

Marmor Test, along with other DA tests

Dark Adaptometry software license and installation instructions

## Dark Adaptometry module ordering information

Model #                                      Dark adaptometry module: D343  
Optional: iMask (D369)

## Available as an upgrade option to any ColorDome or ColorFlash<sup>1</sup> stimulator, on the following systems:

- Diagnosys *E<sup>3</sup>* desktop systems (with Espion software version 6.63 or newer)
- Diagnosys *Profile* cart-based systems

1. ColorFlash stimulus range is appropriate for DA tests on low vision patients only.

[www.diagnosysllc.com](http://www.diagnosysllc.com)

**US:** Diagnosys LLC; 55 Technology Drive, Suite 100, Lowell, MA 01851; 978-458-1600; sales@diagnosysllc.com

**EU:** Diagnosys Vision Ltd; Office 117, DOC Building, Balheary Road, Swords, Dublin, K67 E5A0, Ireland; +44 (0) 1223 520699; mail@diagnosysvision.com

**UK:** Diagnosys UK Ltd; 5 Trust Court, Chivers Way, Vision Park Histon, Cambridge, CB24 9PW, UK; +44 (0) 1223 520699; mail@diagnosysuk.co.uk

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