

Clinical Evaluation of Varilux® Physio® vs. Individualized DS PAL

Research conducted by independent eyecare research organization (London, UK) May 2006 - June 2007



PURPOSE

To evaluate and compare the performance of Varilux Physio and an Individualized DS PAL for everyday use.

Varilux Physio - 1.67 traditionally surfaced with Wavefront Advanced Vision Enhancement Technology™

Individualized DS PAL - 1.67 digitally surfaced with design individualized to fitting characteristics

METHODS

- ♦Comparative, double-masked, dispensing study (each lens design worn 3 weeks)
- ♦Evaluation of each lens design recorded through questionnaire after wearing period & comparative questionnaire at the end of the test

Fitting parameters:

- ♦monocular Pds
- ♦FRP @ center pupil
- ♦Individualized lens was individualized according to manufacturer's parameters (PD, vd, panto, neardist.)

Each subject subjectively compared designs for:

- ♦Distance Vision
- ♦Intermediate Vision
- ♦Near Vision
- ♦Dynamic Vision (subject moving / world moving)
- ♦Visual Fatigue
- ♦Zone Transition
- ♦Adaptation
- ♦Overall Preference

SUBJECTS

N = 70 subjects

Refractive Condition:

	-6.00 to -4.00	-4.00 to -2.00	<-2.00
Myopes	5	9	11
	TOTAL 25		
	+6.00 to +4.00	+4.00 to +2.00	<+2.00
Hyperopes	2	13	30
	TOTAL 45		

Median ADD: +2.00 ADD (r= +0.75 to +2.75)

Inclusion Criteria:

- <±0.50 change from previous Rx
- Corrected V.A. 6/6 (10/10) each eye
- PAL wearer for > 6 months

Exclusion Criteria:

- systemic condition having influence on VA
- medical treatment/medication influencing VA

CONCLUSIONS

Overall, **subjects preferred Varilux® Physio® 4:3 over Individualized PAL.** Varilux Physio was also preferred by more subjects in 6/7 of the specific areas measured (Graph 1). Qualitatively, subjects had a higher evaluation of Varilux Physio for every specific activity measured (Graph 2). Qualitative evaluations were significantly better for vision, comfort, and overall satisfaction (Graph 3).

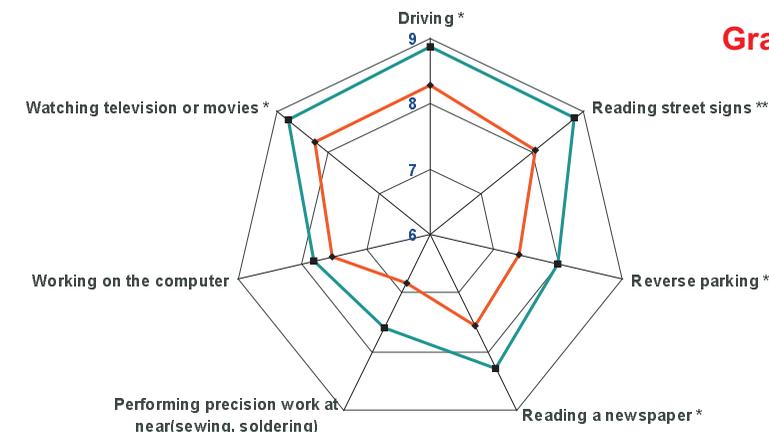
The data indicates Varilux Physio provides superior performance for everyday visual activities when compared to the individualized DS PAL.

STATISTICAL RESULTS

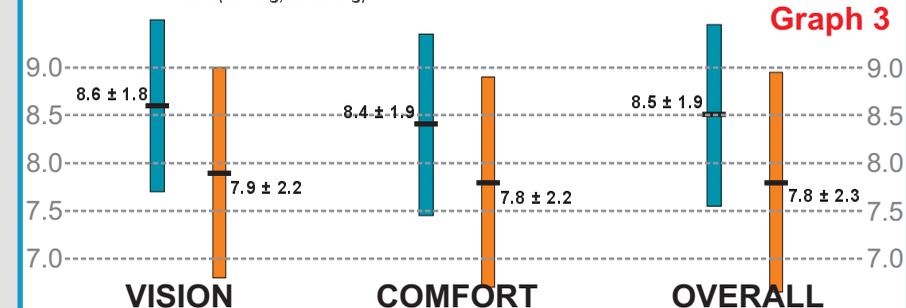
Graph 1

N = 70	Varilux Physio	Individualized	No Preference	p-value
Adaptation	27	14	29	0.0609
Distance Vision	25	17	28	0.2812
Intermediate Vision	18	21	31	0.5218
Near Vision	29	17	24	0.1048
Dynamic Vision	27	18	23	0.2330
Visual Fatigue	21	18	31	0.7488
Zone Transition	25	15	30	0.1547
Overall Preference	36	27	7	0.3135

■ VARILUX PHYSIO ■ INDIVIDUALIZED PAL



Graph 2



Graph 3