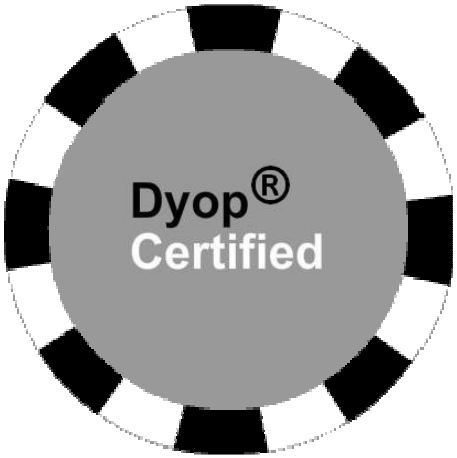
The Dyop® Revolution

Disruptive Technology

… an innovation that helps create a new market and value network, and eventually goes on to disrupt an existing market and value network (over a few years or decades), displacing an earlier technology.



Technology

Arthur C. Clarke's Three Laws

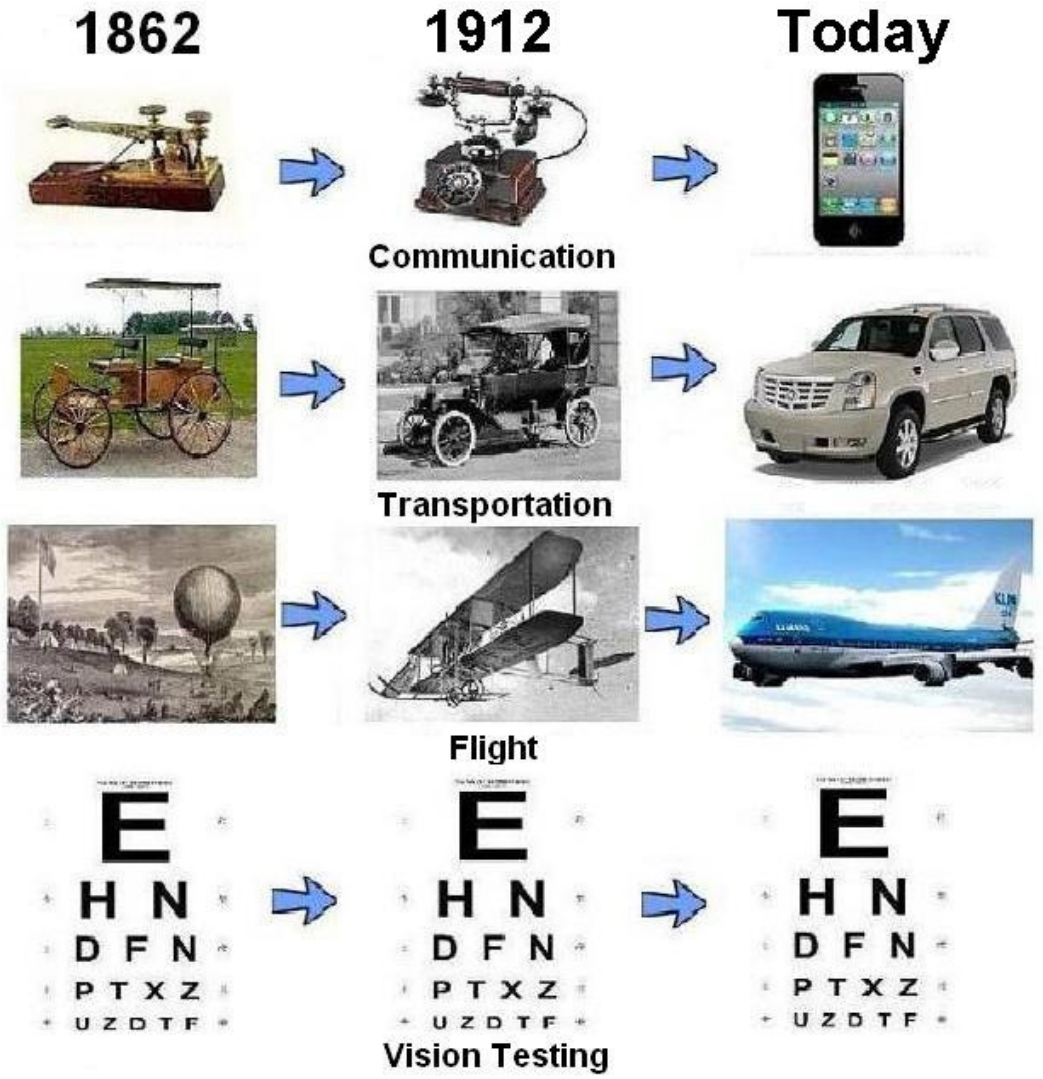
1. When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.
2. The only way of discovering the limits of the possible is to venture a little way past them into the impossible.
3. Any sufficiently advanced technology is indistinguishable from magic.

Technology

1. Technology is the use of increasingly accurate, self-evident, and reproducible information to replace energy and matter.
2. When Technology becomes sufficiently obsolete it becomes an Art Form.
3. The benefit of technology is NOT in what it lets people accomplish, but in how it improves the character of people

The Dyop® Revolution

150 years of technology …..



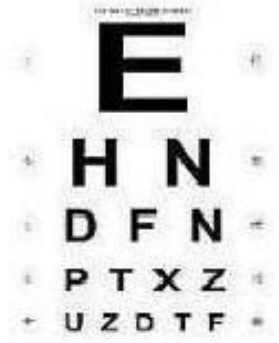
The Dyop® Revolution

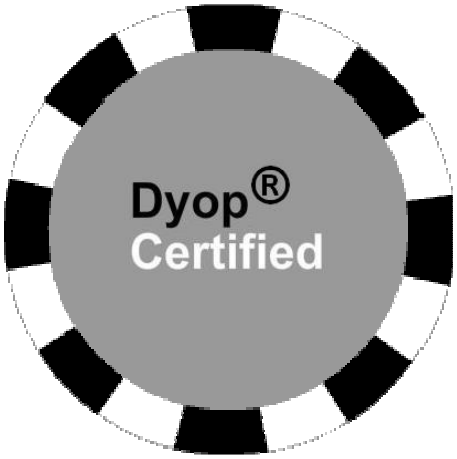
Snellen and Landolt are dead

Hermann Snellen (February 19, 1834 – January 18, 1908) was a Dutch optometrist who introduced the Snellen chart to study visual acuity (1862).

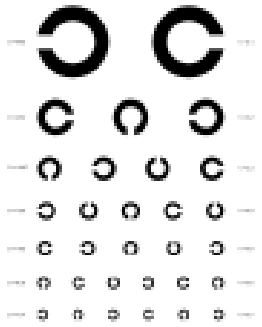
Landolt, Edmund, (17 May 1846 – 9 May 1926) was a Swiss ophthalmologist stationed in Paris, mostly known for a wide range of publications and his research in the field of ophthalmology.

Snellen test





Landolt test



The Dyop® Revolution

All Optotypes are not alike…

1040-5488/94/7101-0006$03.00/0
OPTOMETRY AND VISION SCIENCE

Vol. 71, No. 1, pp. 6–13

Correlation of Optotypes with the Landolt Ring— A Fresh Look at the Comparability of Optotypes

WOLFGANG GRIMM*
Carl Zeiss, Aalen, Germany

ABSTRACT

The legibility of three selected sets of optotypes: (1) letters; (2) Snellen E; and (3) KOLT test have been compared to the Landolt ring in a study based on the

---

the same legibility as the latter. 4. Both shape optotypes (Snellen E and KOLT test) must be approximately 15% smaller than the diameter of the Landolt ring in order to obtain comparable visual acuity scores.

Snellen letters must be 15% smaller to be equivalent to the Landolt ring.

The Dyop® Revolution

1984 - International Vision Standards*

XIV. Review of This Standard

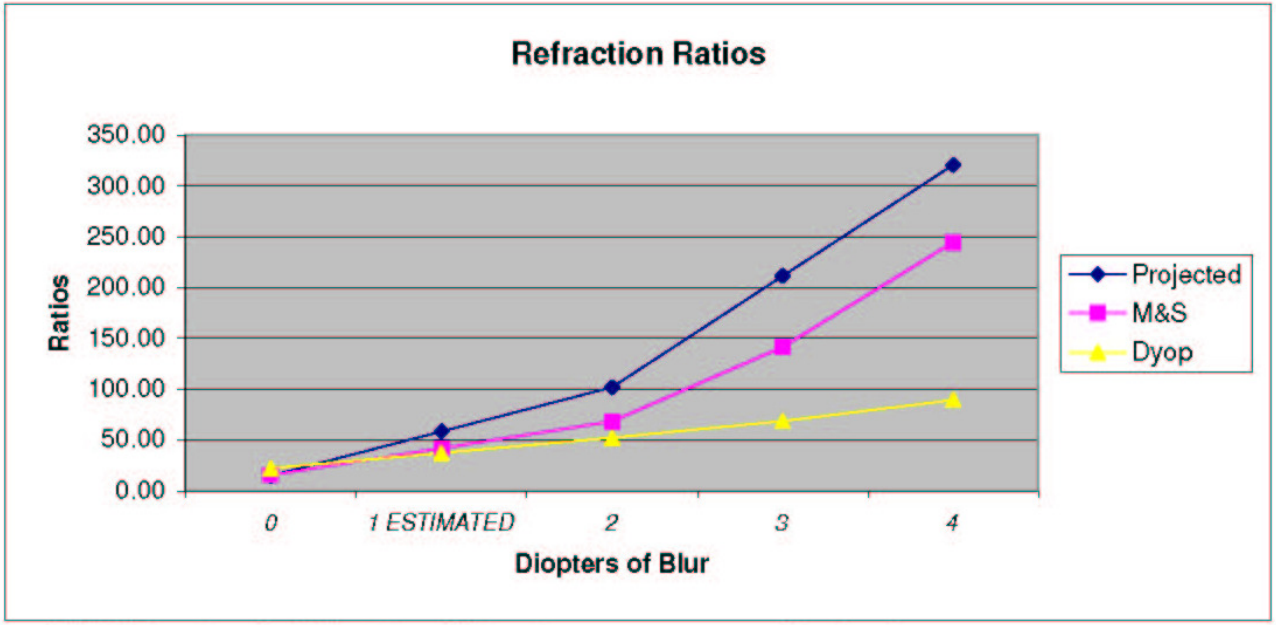
1. **A standard is meant to be a stable entity, yet all points are not established by experimental certainty, deficiencies are periodically revealed and need correction, new developments in tests are occurring, etc. Thus, a standard may be an evolving document and needs to be re-viewed periodically and should not be regarded as immutable.**

*** 1984 - VISUAL ACUITY MEASUREMENT STANDARD**
CONSILIUM OPHTHALMOLOGICUM UNIVERSALE
International Council of Ophthalmology

The Dyop® Revolution

Refraction Study - 6 test subjects
Dr. Paul Harris - SCO
from 2013 AAO Poster Presentation

	Ratios			Ratio Comparisons		
Diopters Blur	Dyop	M&S	Projected	Proj/M&S	Proj/Dyop	M&S/Dyop
0	22.21	15.67	14.93	0.95	0.67	0.71
1 = ESTIMATED*	***37.29***	***42.04***	***58.48***	***1.39***	***1.57***	***1.13***
2	52.37	68.40	102.03	1.49	1.95	1.31
3	68.67	141.80	211.57	1.49	3.08	2.06
4	89.53	244.80	320.93	1.31	3.58	2.73



* NOTE: values for 1 Diopter of blur value are an averaged estimate

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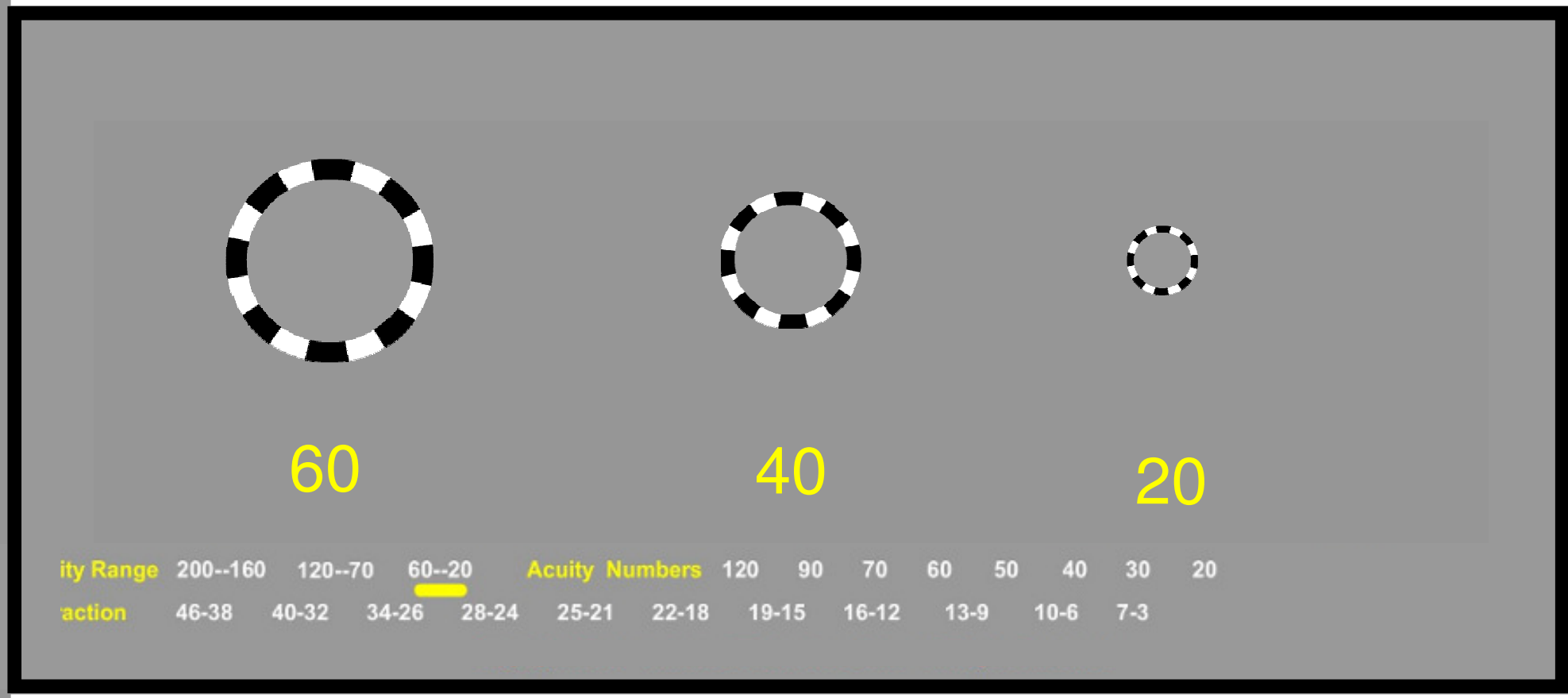
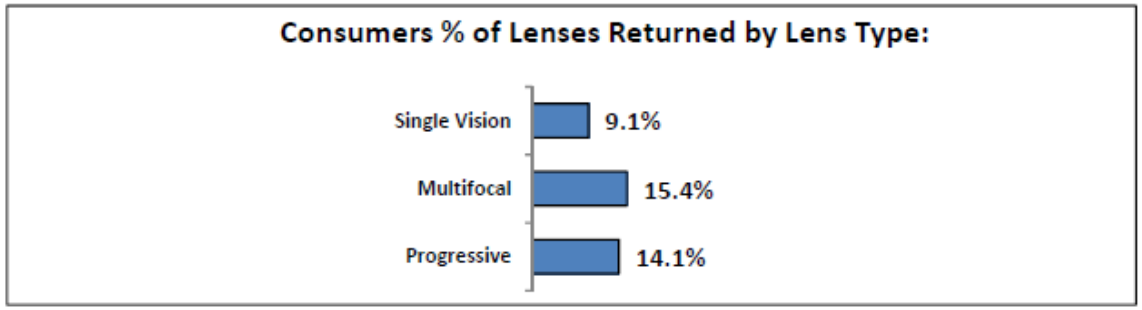
Instead of guessing the displayed letters, the patient simply identifies the number of (calibrated) Dyop® images they can detect as rotating - either Clockwise or Counter-Clockwise - on any computer monitor.



Precise, rapid vision measurement

The Dyop® Revolution

Eye Glass Returns by Lens Type
Source: The Vision Council, 2012 Warranty and Redo White Paper



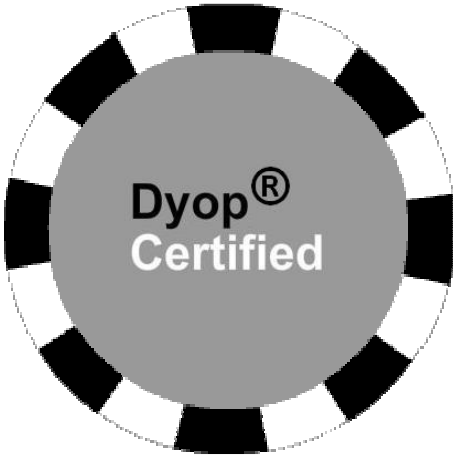
		WEIGHTED Average Percentage Redos PER MONTH	
		% of Returns	% of Jobs
Total (all Rx)	1,590	100.0%	10.7%
Single Vision Rx	572	36.0%	8.8%
Multifocal Rx (Bifocal / Trifocal Only)	240	15.1%	9.7%
Total Progressive Rx (All)	778	48.9%	15.2%
Anti-reflective (All)	842	52.9%	14.0%
Photochromic	386	24.3%	12.5%
Polarized Rx	123	7.8%	12.4%
Number of labs reporting	23	23	23

Eyeglass returns are costing time and money.

The Dyop® Revolution

Advantages of Dyops® as the Vision Standard

- Clinical and Research standards for Dyops™ are identical
- Dyops™ minimize Clinical variations
- Dyops™ eliminate cultural and educational bias
- Dyop™ tests based upon physiology rather than subjective comprehension
- Dyop™ tests are significantly more precise
- Dyop™ tests are significantly faster to administer
- Dyop™ tests provide a significant increase in low vision testing ability
- Dyop™ tests provide infant/non-literate testing relevant to adult acuity



The Dyop® Revolution

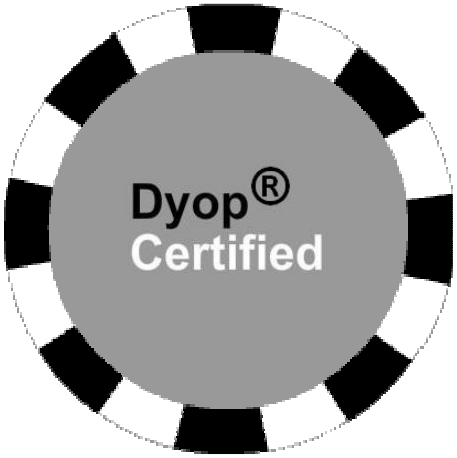
Optometry Benefits (Time/Value)

1 added patient per hour (potential @ 2.5 minutes per refraction)
1000 added patients per year per Doctor with greater patient satisfaction.

Each exam is worth $20 in profits
Each pair of glasses is worth $40 in profits

Potential increased Doctor revenue = $60,000

Potential Patient satisfaction = Priceless



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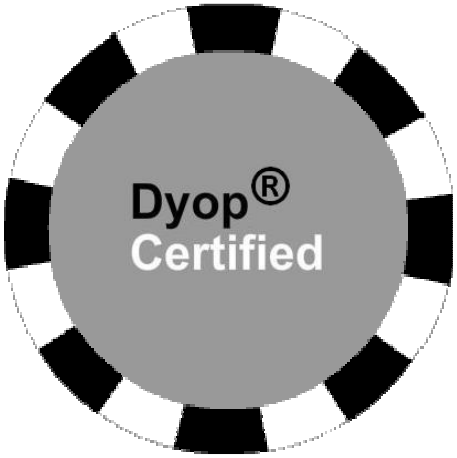
Potential Revenue

20 to 40 cents per patient

100,000,000 refractions per year in the US
200,000,000 refractions per year in China
300,000,000 additional refractions globally

Potential global refraction revenue = $120 to $240 million annually

Potential Patient satisfaction = Priceless



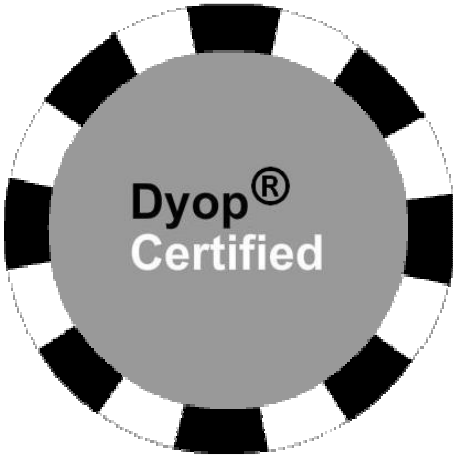
The Dyop® Revolution

Potential Revenue

Dyop® Intellectual Property

Acuity	Chromatic stress – ViewChroma™
Refraction	Visual impairment/intoxication
Infant acuity	Dyop® Simulated 3D
Color screening	Traffic applications
Visual degeneration	Peripheral vision

Potential Revenue = Astronomical



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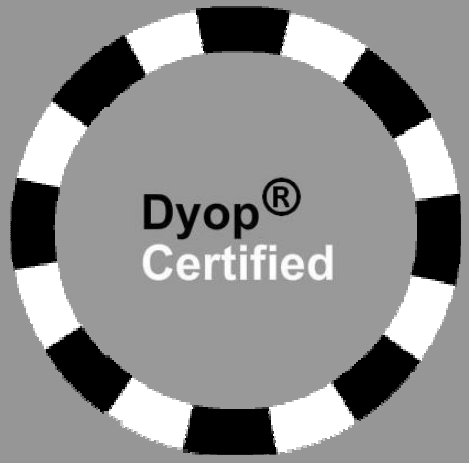

Welcome to the Dyop® Revolution

Helping the world see clearly, one person at a time

Dyop® Vision Associates LLC

U.S. Patent 8,083,353 and Published International Patent US2010/045798 already approved