

Revised

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 6

METHOD FOR DETERMINING
PHOTOGRAPHIC SPEED
AND EXPOSURE INDEX

1st EDITION
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BRIEF HISTORY

This ISO Recommendation R 6 was prepared by Technical Committee ISO/TC 42—Photography, the Secretariat of which is held by the American Standards Association, Inc. (ASA).

In April 1948, the Secretariat asked the General Secretariat to submit, as a Draft Proposal, for study by the Technical Committee, the American Standard Z 38.2.1. - 1947, concerning the method for determining photographic speed and exposure index. This Draft Proposal was distributed on 12 May 1948 to all the Members of the Technical Committee. In view of the fact that no observations were received, the Secretariat considered the Draft Proposal as adopted by the Technical Committee as a Draft ISO Recommendation.

In January 1951, this Draft ISO Recommendation was submitted to all the ISO Member Bodies by the General Secretariat. The following 15 Member Bodies (out of the existing total of 29) sent in their approval:

Australia	Italy	Sweden
Austria	Mexico	Union of South Africa
Belgium	Netherlands	United Kingdom
Czechoslovakia	New Zealand	U.S.A.
Finland	Portugal	Yugoslavia

One Member Body stated that it had no objection to the approval of the Draft:

Denmark

The ISO/TC 42 Secretariat amended the Draft, taking account of the observations made by various Member Bodies.

The revised text was then submitted by correspondence to the ISO Council Members who decided, in May 1954, to accept it as an ISO RECOMMENDATION.

METHOD FOR DETERMINING PHOTOGRAPHIC SPEED AND EXPOSURE INDEX

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INTRODUCTION

This recommendation describes a sensitometric method for determining and expressing the photographic speed of roll films, film packs, miniature camera films, sheet films and plates. It is believed that the method represents an improvement over other commonly used procedures, since it more fully satisfies the two fundamental requirements of a system intended for international use:

(1) The method must give results which can be applied directly and significantly to picture-taking practice.

(2) The method must be simple to operate and must give unequivocal results.

The recommendation applies to individual samples and to a product as a whole. The sensitometric criterion upon which the method

is based was first suggested by experimental work reported in various technical journals.*

A quantity called "Exposure Index" is specified in this recommendation. It is a rating for a film or plate for use in connection with exposure tables, exposure computers, exposure meters and similar devices for obtaining properly exposed negatives. The term "Exposure Index" was chosen to avoid confusion with Speed. Exposure Indexes are expressed in cube-root-of-2 steps, and may be calculated on either an arithmetic or a logarithmic scale. The arithmetic numbers may be used directly with most American-made exposure meters and exposure computers. Similarly, the logarithmic scale numbers may be used directly with many meters and computers of European manufacture.

* Loyd A. Jones: The evaluation of negative film speeds in terms of print quality. *Journal of the Franklin Institute*, p. 227, 297 and 497 (1939).

Loyd A. Jones and C. N. Nelson: A study of various sensitometric criteria of negative film speeds. *Journal of the Optical Society of America*, p. 30, 93 (1940).