ANSI/ADA Standard No. 132
Approved by ANSI: May 29, 2015

American National Standard/
American Dental Association

Standard No. 132

Scanning Accuracy of Dental Chairside and Laboratory CAD/CAM Systems

ADA American Dental Association®
Council on Scientific Affairs

2015

AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 132 FOR SCANNING ACCURACY OF DENTAL CHAIRSIDE AND LABORATORY CAD/CAM SYSTEMS

The Council on Scientific Affairs of the American Dental Association has approved American Dental Association Standard No. 132 for Scanning Accuracy of Dental Chairside and Laboratory CAD/CAM Systems. This and other standards for dental materials, instruments and equipment are being formulated by working groups of the ADA Standards Committee on Dental Products. The Committee has representation from all interests in the United States in the standardization of materials, instruments and equipment in dentistry. The Council has adopted the standards, showing professional recognition of their usefulness in dentistry, and has forwarded them to the American National Standards Institute with a recommendation that the standards be approved as American National Standards. The American National Standards Institute granted approval of ADA Standard No. 132 as an American National Standard on May 29, 2015.

The ADA Standards Committee on Dental Products thanks the members of Working Group 9.66 on Scanning Accuracy of Dental Chair-Side and Laboratory CAD/CAM Systems and the organizations with which they were affiliated at the time the standard was developed:

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FOREWORD

(This Foreword does not form a part of ANSI/ADA Standard No. 132 for Scanning Accuracy of Dental Chairside and Laboratory CAD/CAM Systems).

Within the last two decades, the field of 3-dimensional (3D) optical metrology has had a significance impact in the field of dentistry. The use of Dental Chairside and Laboratory CAD/CAM systems has become commonplace. However, no ANSI standard has been released that describes the relevant technical requirements. ADA/ANSI Standard 132 provides a comprehensive procedure to evaluate 3D optical metrology systems used in dentistry.

This standard describes three test objects that represent typical dental scanning parameters use to assess the accuracy, repeatability and reproducibility of 3D optical metrology systems. Additionally, this standard describes the test analysis methods and the acceptable relative error for dental chairside and laboratory CAD CAM systems.

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