# GR Phantom

## CR Phantom Type I + II

according to ISO 16371-1, ASTM E2445









#### Test Phantom for Qualification of Image Plate Scanner Systems (CR)

CR Phantom enables to test all relevant parameters of CR Scanner systems and Imaging Plates (IP) like Basic Spatial Resolution, MTF, Contrast Sensitivity, Blooming, Laser Jitter, Scanner Slippage, Shading, Erasure and more. These tests required and described in detail in standards ASTM E2445 and ISO 16371-1 have to be performed periodically for checking process control and long-term-stability.

The KOWOTEST CR Phantom type I exceed these standards by including two Duplex Wire Type IQIs and measuring points for Shading in both axes - portrait and landscape. All required information is mapped on the Imaging Plate with a single X-ray exposure. Phantom must not be rotated to generate information of second axis. This results in higher accuracy and significant time savings.

## Specification CR Phantom Type I according to ASTM E2445 and ISO 16371-1:

#### IQI, Gauge

- A T-Target
- B Duplex Wire Type IQIs
- C BAM Snail
- D Line Pair Gauges
- **E** Shading Tests
- F Cassette Position Locator
- **G** Homogeneous Strip Target
- **H** Lucite Plate
- I Linearity IQI cm-/ inch Rulers
- J Contrast Sensitivity Gauges

Dimensions:

#### Test, Check

Laser Jitter, MTF, PMT Non-Linearity

Basic Spatial Resolution, Unsharpness

Central Beam Alignment

Resolution

Shading

Position of IP

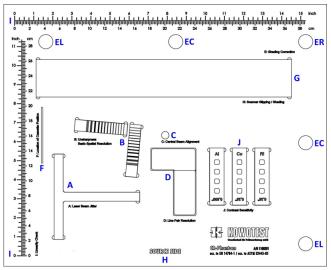
Scanner Slippage

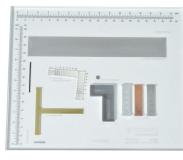
Carrier Plate

Spatial Linearity, Distortion

Contrast Sensitivity

430 x 350 x 19 mm





### Specification CR Phantom Type II (USAF) according to ASTM E2445:

#### IQI, Gauge

Jitter Target - brass

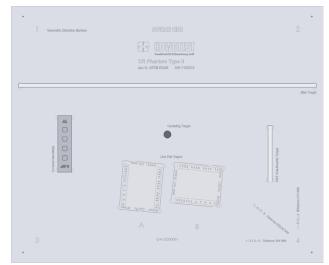
Test, Check
rass Laser Jitter, MTF, Blooming (Flare)

PMT Non-Linearity Target PMT Linearity

BAM Snail Central Beam Alignment
Line Pair Gauge Line Pair Resolution
Lucite Plate Carrier Plate
Geometric Disortion Markers Linearity Check

Contrast Sensitivity Gauge AL Contrast Sensitivity

Dimensions: 17 x 14 x .67 inch





#### Scope of Supply:

CR Phantom - Type I - 2x Duplex IQIs D13, in wooden case

CR Phantom - Type I HiRes - 2x Duplex IQIs D15, in in wooden case

CR Phantom - Type I UHiRes - 2x Duplex IQIs D17 HR4, in in wooden case

CR Phantom - Type II in wooden case

Article No.: 11 00201

Article No.: 11 00211 Article No.: 11 00217

Article No.: 11 00215



Test certificates acc. to ASTM E2445, ISO 16371-1 and Declaration of Conformity acc. to EN ISO/ IEC 17050-1/-2