INTRODUCTION
The need for Quality Control is emphasised throughout any production system. Measurement and traceability of equipment performance, and assurance of repeatability and accuracy, are paramount in establishing correct working practices. Checking the performance of a Radiographic System for Quality Assurance purposes has historically been an arduous task, with differing standards and multiple test gauges and exposures.

CIT’s CR Test Phantom incorporates the required test elements into a **Single simple-to-use unit**, allowing the evaluation of Computed Radiography (CR) systems for industrial radiography in accordance with ASTM and EN International Radiographic Testing standards as well as monitoring the quality of the chosen system.

The regular use of the CR Test Phantom will assure the **long-term stability**-performance measurements of the CR system over the life-cycle of the devices.

**BASIC RADIOPHGRAPHIC MEASUREMENT PERFORMANCE**

There are several factors affecting the quality of a CR image, including the spatial resolution of the IP system, geometrical unsharpness, scatter and contrast sensitivity (SNR). There are some additional factors like scanning parameters that affect the accurate reading of displayed digital images.

The CR Phantom provides the quality indicators for measuring of:

- Shading
- **MTF**
- Spatial resolution
- **Jitter**
- Central beam alignment
- **Linearity**
- Converging Gauge - 20Lp/M
- **Slipping**
- Radiograph Set-Up Unsharpness
- **Contrast Sensitivity**

**STANDARD REFERENCES**

The CIT Test Phantom is designed to fully comply with the requirements of:

- ASTM E2445-05 Appendix X1, • EN 14784-1:2005.
- ASTM E2002 / EN462-5 • ASTM 1647-98a

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Sizes</th>
<th>8” x 10”(203 x 254mm)</th>
<th>14” x 17”(356 x 432mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>CIT/CR-Phan 0810</td>
<td>CIT/CR-Phan 1417</td>
</tr>
<tr>
<td>Dimensions</td>
<td>34 x 24 x 9 cm² 3 Kg</td>
<td>35 x 45 x 14 cm² 6 Kg</td>
</tr>
<tr>
<td>Accessories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1 pack [4 off]) each (14”x17”)</td>
<td>Al filter plate(2mm) – enables operation up to 200kV x-rays</td>
<td></td>
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<tr>
<td></td>
<td>SS filter plate(2mm) – enables operation up to 320kV x-rays</td>
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<tr>
<td></td>
<td>Cu filter plate(2mm) – enables operation up to 450kV x-rays</td>
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</tbody>
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For further details please contact CIT at the below address.

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**Alignment and use of CIT Test Phantom**

- **Alignment and use of CIT Test Phantom**
- **Radiographic Source**
- **Test Phantom Film or DIP**
- **DAM ‘Shoe’ Even Field Plate**
- **Lead Sheet**
- **Lead ‘B’**

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