

Let there be light...

Manufacturer's of World's Most Advanced Digital Computed Radiography Imaging Technology

And there is CIT

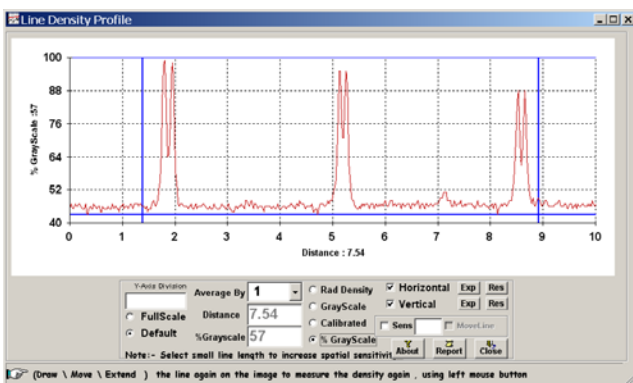
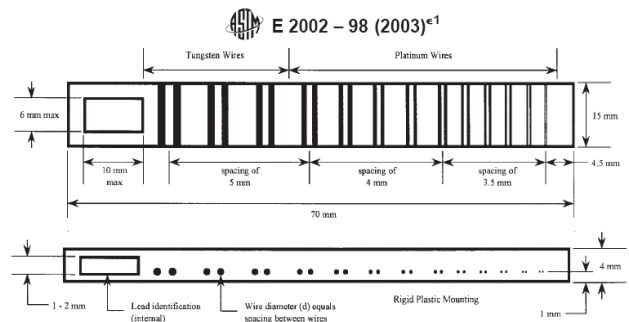
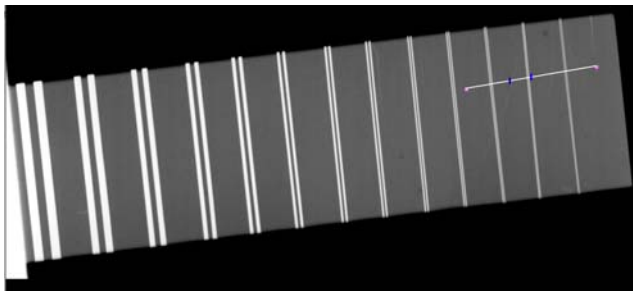
PRODUCT SHEET

Duplex IQI EN462-5 /ASTM E2002-98 for industrial NDT radiography

CIT. PART Code: CIT/Duplex IQI

IQI – Image Quality Indicator – is a device for showing the quality of a radiograph and **Total Radiographic Unsharpness**. The quality of a radiograph determines the amount of details that can be shown. For measuring image Unsharpness, IQI is a particularly useful tool for establishing and monitoring the performance of radiosopic (real-time), computed radiography, digital radiography systems. This practice is applicable to radiographic and radiosopic imaging systems utilizing X-Ray and gamma ray radiation sources. It can be used effectively with radiation energies up to 400kv. When using energies in the mega volt range the results may not be completely satisfactory.

Duplex IQI in accordance to EN_462-5 is used to evaluate and measure the **Total Image Unsharpness** as independently as practicable from the imaging system contrast sensitivity limitation. The CEN standard, EN 13068 makes its use mandatory in certain cases. The IQI consists of 13 wire pairs embedded in rigid plastic. The wires of platinum and tungsten and are exactly spaced to correspond to the diameter of each pair. The degree of unsharpness is indicated by the number of wire pairs that can be seen. As unsharpness increases, the wires merge to form a single image. The gauge consists of 13 elements (pair of wires) mounted in a rigid plastic holder with unique serial number engraved and is supplied with the certificate of conformance. The EN 462-5 model is an exact replacement for the old BS 3971 model IIIA, itself identical to CERL B.



| Element No D: =Duplex | Corresponding Unsharpness | Wire diameter And spacing, mm |
|--------------------------|------------------------------|----------------------------------|
| 13D | 0.10 | 0.050 |
| 12D | 0.13 | 0.063 |
| 11D | 0.16 | 0.080 |
| 10D | 0.20 | 0.100 |
| 9D | 0.26 | 0.130 |
| 8D | 0.32 | 0.160 |
| 7D | 0.40 | 0.200 |
| 6D | 0.50 | 0.250 |
| 5D | 0.64 | 0.320 |
| 4D | 0.80 | 0.400 |
| 3D | 1.00 | 0.500 |
| 2D | 1.26 | 0.630 |
| 1D | 1.60 | 0.800 |

Performance levels of unsharpness of images are relative to user's applications and shall be specified in the purchaser/supplier agreement

Computerised Information Technology Limited

20, Potters Lane, Kiln Farm, Milton Keynes, Buckinghamshire, United Kingdom MK11 3HF

Tel: +44(0)1908260082, Fax: +44(0)1908260084, Email: info@cituk.com

Website: www.cituk.com | Regd. Office England: 2149641