For release Monday 11th September 2006:

Today, Ocuity Ltd. (Oxfordshire, UK), the 3D optical specialists, announces that they have successfully delivered the next advance in their Polarisation Activated Microlens Technology for full brightness, high quality switchable glasses-free 2D/3D displays on a GSM cell phone Demonstrator.

Working in partnership with Swedish LCD Center AB (Borlänge, Sweden), and using LCD Center’s plastic display technology Ocuity was able to deliver a display that was lighter and thinner than the glass display equivalent, while still preserving the excellent 3D-viewing properties. Swedish LCD Center’s plastic display technology has been used as a polarisation switch in the 2D/3D demonstrator. The plastic display enables a polarisation switch with a third of the thickness and a fifth of the weight of a standard 0.8mm glass polarisation switch allowing a total thickness for the switchable 3D component of less than 0.7mm.

Paul May, Commercial Director of Ocuity Ltd. explained: “Our Polarisation Activated Microlens technology is easy to manufacture and to add to existing displays. Ocuity’s technology combined with the reduced thickness and weight of the plastic LCD means that the barriers to delivering thin and rugged handsets with compelling stereo 3D entertainment have been eliminated. The handset manufacturers’ need for thin phones and the consumers’ desire for 3D can at last be matched.”

Christian Adås, Acting Managing Director of SLCDC said “Our plastic LCD technology can produce LC-switches that are less than 0.3mm thick and the substrates are much less fragile than thin glass too. The partnership with Ocuity will enable us to accelerate our marketing activity.”

Jonathan Harrold, co-founder of Ocuity commented “Cell-phone engineers are under great pressure to take even 0.1mm out of the display thickness, so this advance is eagerly anticipated”.

Demonstrator data
- GSM cell phone base platform
- 2.2” Transreflective TFT-LCD
- 240xRGBx320 QVGA pixel display
- High contrast 2D and 3D images
- Less than 0.3 mm thick polarisation switch consisting of plastic LCD technology enabling a thinner a lighter display with more comfortable 3D-viewing properties

2D-3D display GSM phone demonstrator with plastic LC-switch
Technology
The switchable 2D/3D function is enabled by Ocuity's Polarisation Activated Microlens technology (see figure below). The positioning of the plastic display/polarisation switch is shown in the figure below.

About Ocuity
Founded in 2001 and based near Oxford in the UK, Ocuity is the world leader in reconfigurable glasses-free 2D/3D display technologies. Their patented Polarisation Activated Microlens™ technology has been licensed to major flat-panel display manufacturers to enable high quality 3D images to be viewed on their products without glasses and without compromising the regular 2D display performance. All this can be done by a thin optical element attached to the outside of the display and at a small premium to the base panel cost.

More information is on www.ocuity.co.uk.

Polarisation Activated Microlens is a trademark of Ocuity Ltd.

About Swedish LCD Center
Swedish LCD Center AB is an industrial research institute within the display sector founded 1999 and located in Sweden. SLCDC offers innovative and environmentally friendly solutions and competence in the display field to improve profitability and competitiveness for its customers. Technologies prioritised by SLCDC are flexible plastic displays, inkjet processing and photo alignment techniques.


Applications for switchable 2D/3D-technology
Ocuity’s technology is compatible with phone displays, laptops and desktop monitors. Applications include stereo 3D-TV, 3D-PMP, gaming and 3D picture messaging.