Written by Marco Attard 13. May 2016

Researchers at the Queen's University Human Media Lab show off a smartphone first-- the HoloFlex, a device featuring a flexible body and a holographic display allowing for bendable glasses-free 3D.



Seen in early prototype form, the Holoflex features a novel display with a microlens array on top. The lenses disperse light in multiple directions to create 3D images multiple users can simultaneously see, all without need for head tracking or 3D glasses.

The bendable aspect of the device is also interesting, since it provides a means for interaction with on-screen images in the 3rd dimensions. One example shown by the researchers is a 3D version of Angry Birds with users bending the screen in order to pull the elasic rubber band making the bird fly.

Powering the Holoflex prototype are a 1.5GHz Qualcomm Snapdragon 810 processor and 2GB RAM, while Android 5.1 handles OS duties.

However the device comes with a catch-- while the display is a 1920x1080 OLED number, once images go through the microlens array the output clocks at just 160x104 pixels. Which is slightly too little as far as modern smartphones are concerned, but it does mean the technology has a future once 16K resolution displays become standard.

Go Holoflex: Holographic, Flexible Smartphone