Using the MegaVision EV Multispectral Camera as a Spectrophotometer

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The MegaVision EV
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• 50 MP digital camera back
• $8176 \times 6132$ pixels, 6.0 µm pixel size
• MegaVision 12-mm f/4.5 hyperspectral lens (350–1000 nm)
• Capture rate: 1 image/2 sec.
• Cost: $125,000 USD
• Number installed: ~40
• Number of trained operators: ~50
Narrow-Band LED Illumination

• UV 365, 395 nm
• Visible 420, 445, 470, 500, 520, 560, 590, 620, 630, 650 nm
• IR 700, 735, 780, 860, 940, 1050 nm
Projects

• characterization of water resistance
Projects

• fade resistance of fluorescent inks and 3D-printed objects
Projects

• color permanence of 3D printed objects