# CALTEX SCIENTIFIC

See HD Difference

## LX-100



LX-100 is the best 1080p HD digital USB microscope for stepping up from stereo zoom microscope, mantis or magnifier lamp. With 60 frames per second and 1080 HD image quality, what you see on LCD is the same as what you see through microscope eye pieces. 1080p HD makes ergonomic inspection without eye strain and work fatigue an affordable reality.

| 15x-100x Zoom | 3D View | Capture Images | Measurement Software |
|---|---|---|---|

3D rotational angle view and 15x to 100x zoom of LX-100 provide unparalleled real-time 3D view for PCB and Medical Devices inspection that is simple to use and remarkable in image quality. Long working distance allows soldering rework and assembly by watching LCD screen. HD60 camera offers SD card for capturing image and video without a computer. With built in USB2.0 port and measurement software, performing dimensional measurements on Windows computer is as simple as mouse clicks. All of these latest HD camera technology and zoom lens integrated in a package that is remarkable and affordable.
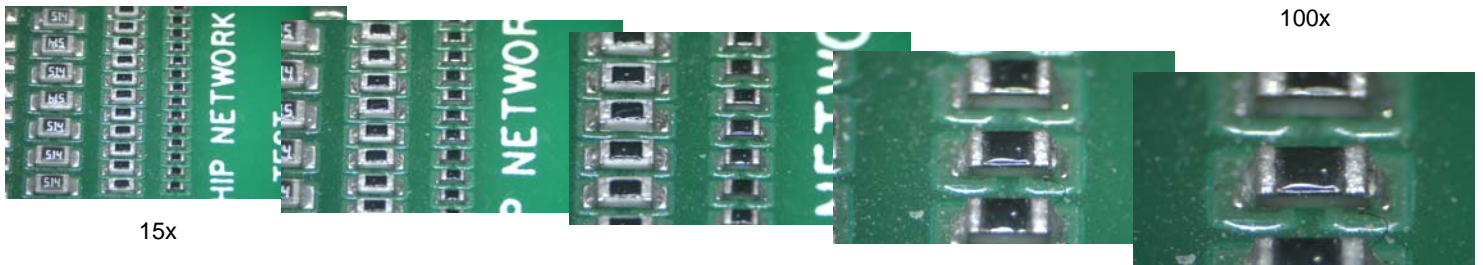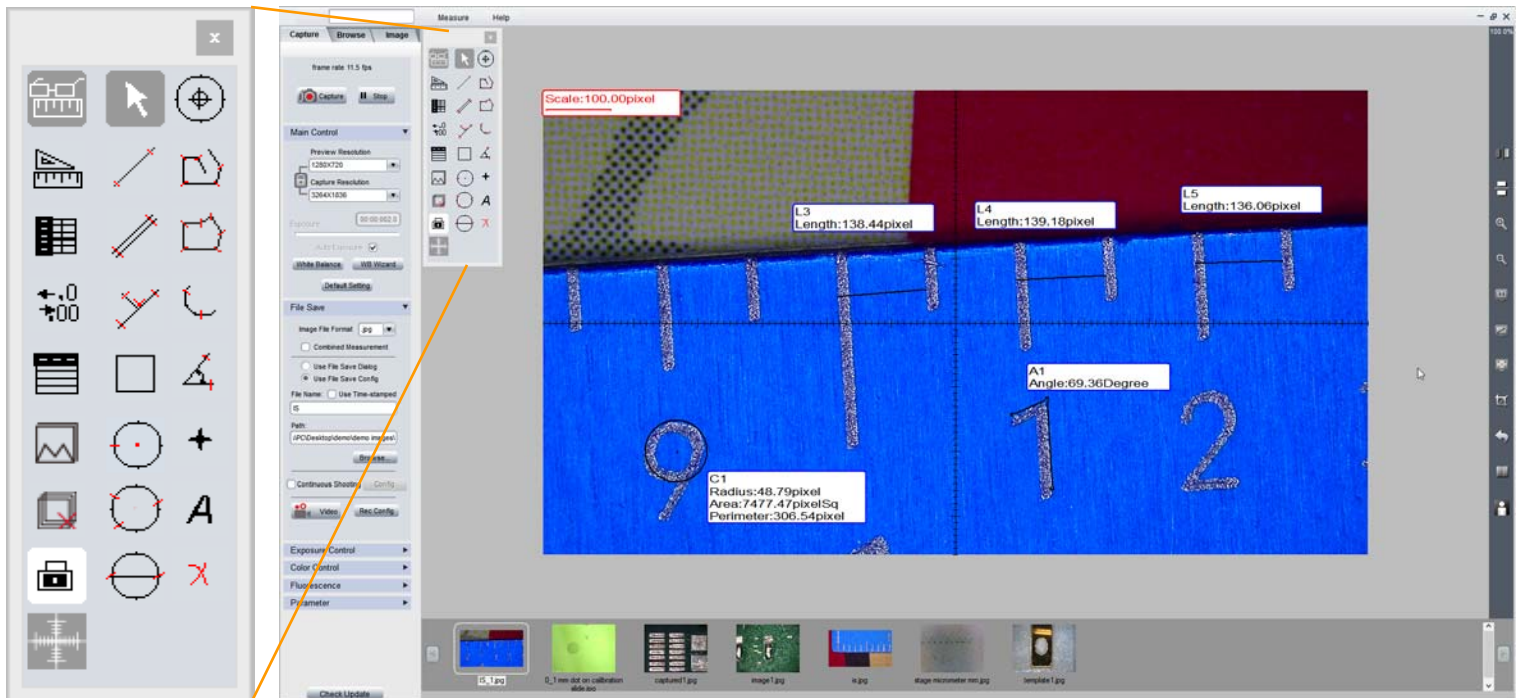
**FULL HD 1920×1080**  **USB**  **SD**

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**LX–100**

# 15x-100x Zoom (up to 1x-2,000x)
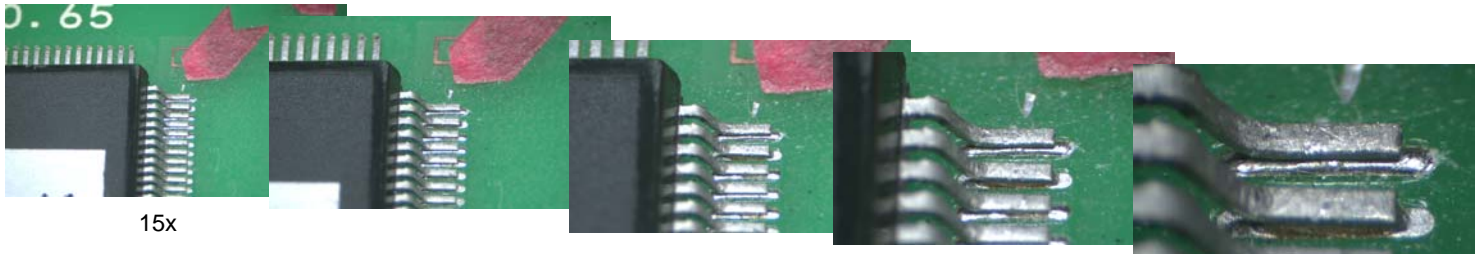


15x

100x

15x

100x
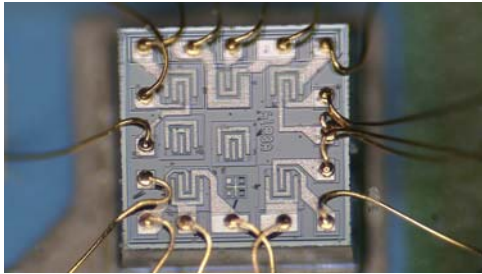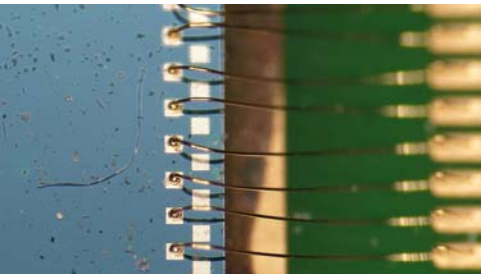
# Measurement with Simple Mouse Click

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# Quick switching 3D angle view and straight view

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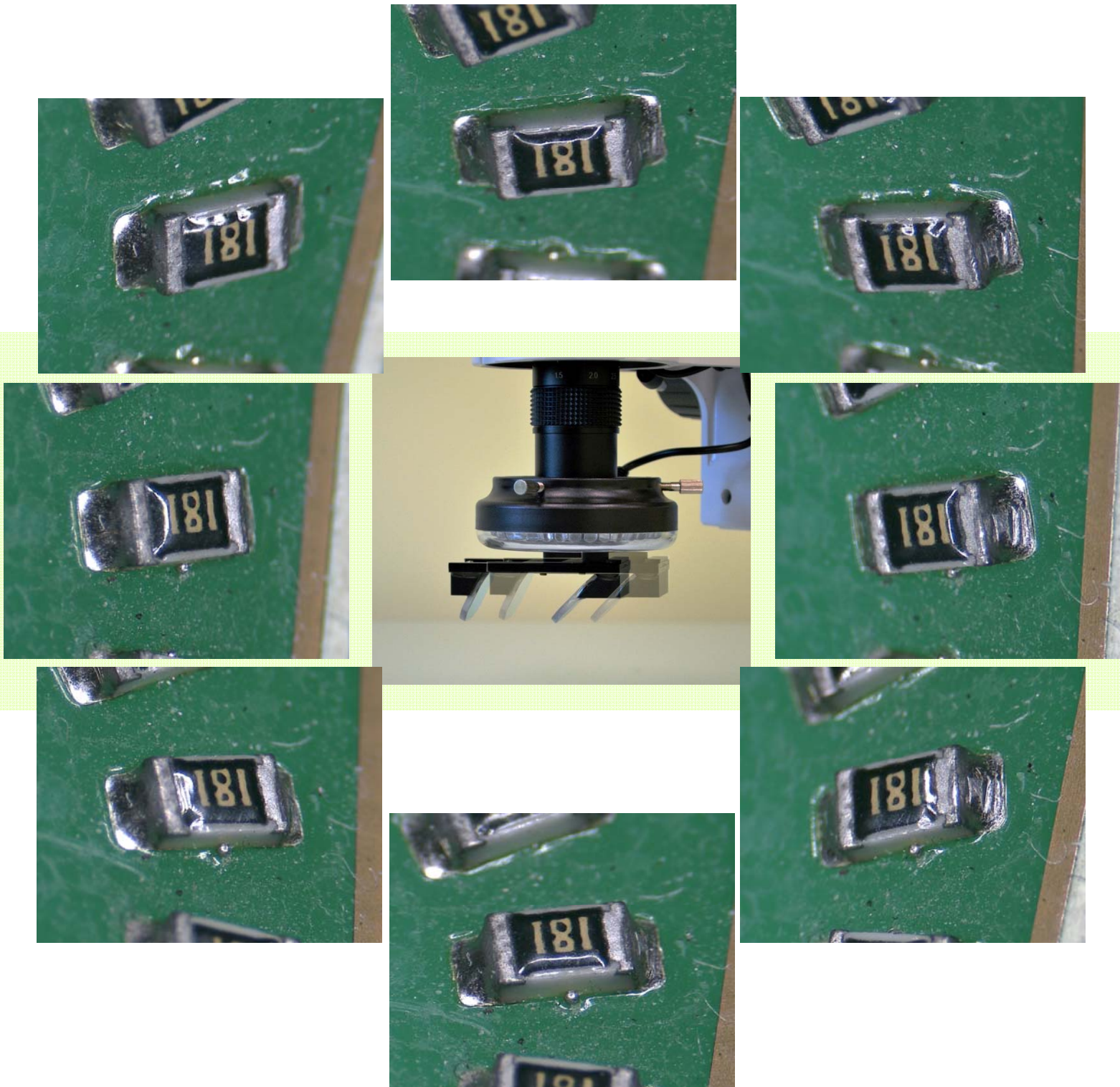
LX-100

# LX-100 with 3D BGA Inspection Mirror
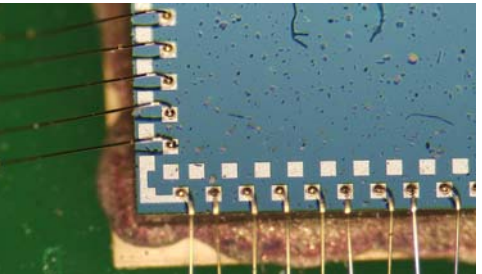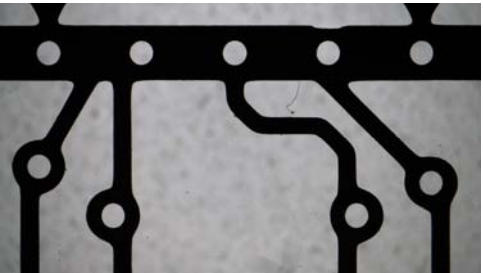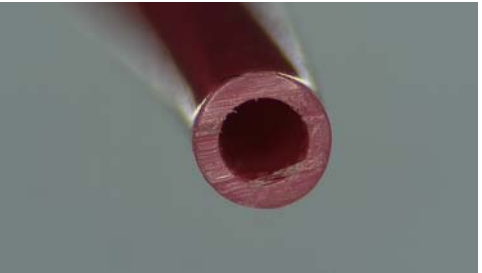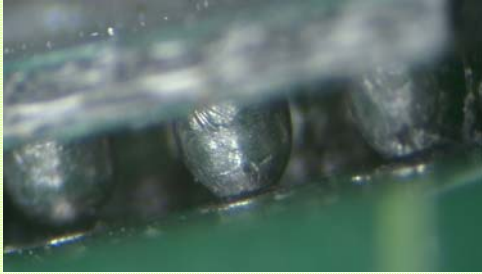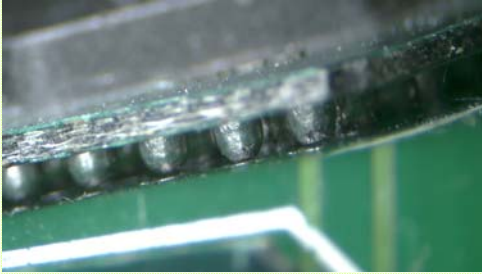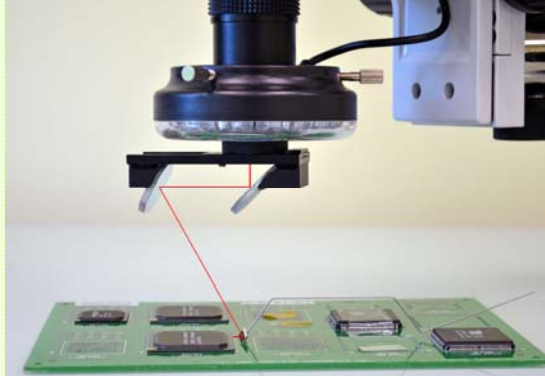
# Models and Options
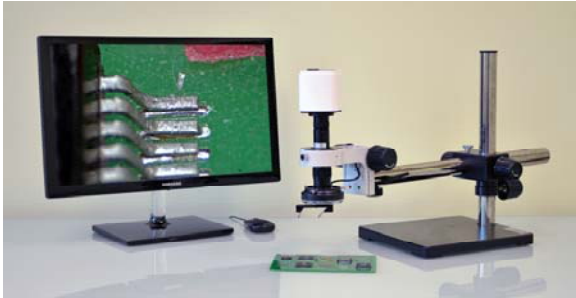


**LX-100-HD60-BS**

Boom Stand & LCD-24



Multi tilting angle multi position boom stand



**LX-100-HD60-TSBL**

Track Stand Back Light & LCD-24



10" LCD & Post Stand



**LX-100-HD10L-BL**

10" LCD built-in & Boom Stand



10" LCD built-in & Track Stand



**LX-100-HD60L10FM-BS**

10" LCD flex mounted & Boom Stand



10" LCD flex mount & Track Stand

# Specifications

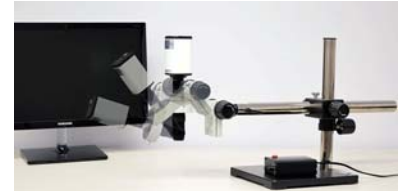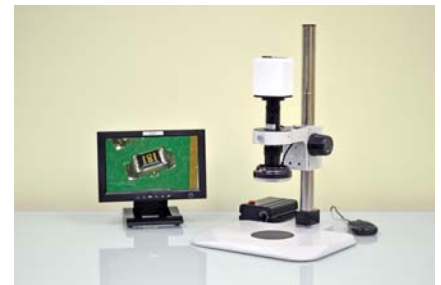| LX-100 Specifications | |
|---|---|
| HD-60 | 1080p HD digital USB camera 6MP, HDMI, USB2.0, SD card, measurement software. 60 FPS |
| HD-10L2 | 1080p HD camera 2MP with built-in 10" HD LCD (1280x800) SD card. 60 FPS |
| LCD-10 | 10.1" LED Backlit, 1024x600, up to 1920x1080 |
| LCD-24 | 24" LED Backlit, 1920x1080 |
| Zoom Magnification | 15x-100x |
| Zoom Range | 0.7x-4.5x (1:6.5 zoom ratio) |
| Working Distance | 96mm |
| Field Of View | 16mm-2.8mm |
| Expanded Magnification | 4.65x-1080x |
| Expanded Field of View | 0.3mm-77mm |
| Working Distance Range | 46mm-331mm |
| Illumination | LED ring light with intensity adjustment |
| Power Supply | 120V AC 50/60Hz |
| Computer Requirements | Windows 8 or 7, and USB 2.0 |
| Stands | Post stand with focus block (PS) |
| | Track stand with focus block (TS) |
| | Post stand with back lighting (PSHF) |
| | Track stand with LED back lighting and focus block (TSLB) |
| | Multi position multi angle viewing boom stand with focus block (BS) |
| | Hydraulic arm stand mounting to table edge, with focus block (HA) |
| Warranty | One Year Warranty |

| Options | |
|---|---|
| **3D angle lens adapter** | |
| LR-35 | 3D 360° manual rotation with 35° Oblique angle view |
| **Lens adapters** | |
| LA-03 | 0.3x reducer, 331mm WD |
| LA-05 | 0.5x reducer, 199mm WD |
| LA-075 | 0.75x reducer, 131mm WD |
| LA-15 | 1.5x magnifier, 60mm WD |
| LA-20 | 2x magnifier, 46mm WD |
| HL-5x | 5x infinity high power objective, NA 0.13, 44.5mm WD |
| HL-10x | 10x infinity high power objective, NA 0.28, 34mm WD |
| HR-20x | 20x infinity high power objective, NA 0.29, 31mm WD |
| **Lighting options** | |
| LX-CA | Coaxial lighting module for LX-100 |
| LX-CA-LED | LED point light for coaxial lens module for LX-CA |
| **XY stage options** | |
| XY-76 | 75x56mm travel, with 116×96mm back light window. For track stand and post stand with back lighting |
| XY-76R | XY stage of 180X155X34mm, with XY Travel distance: 75X55mm, plus rotational dial. For track stand and post stand with back lighting |
| XY-1711 | XY manual stage for easy movement of large PCB board, 17"x11" size, 11"x9" travel range |
| XY-1711G | XY manual stage for easy movement of stencil, 17"x11" size, 11"x9" travel range, glass plate for back lighting |
| **Advance measurement software options** | |
| IMS-1000 | Advance dimensional measurement software XY, circle radius & diameter, angle, area, center to center. export to Excel, infinity depth of focus, photo stitching image comparison, overlay for quick gauging go/no go |
| SM-1 | Stage micrometer for calibration |

## LX-100 lens configuration and specifications

| Auxiliary Lens | Working Distance (mm) | LX-100 zoom lens body | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.35X | | 0.5X | | 0.75X | | 1.0X | | 1.5X | | 2.0X | |
| | | Mag. | FOV (mm) | Mag. | FOV (mm) | Mag. | FOV (mm) | Mag. | FOV (mm) | Mag | FOV (mm) | Mag | FOV (mm) |
| 0.3X | 331 | 4.65X-31X | 77-12 | 6X-41X | 59-9 | 9X-61X | 39-6 | 12X-81X | 29-4 | 18X-121X | 19.6-3 | 24X-162X | 14.7-2 |
| 0.5X | 198 | 7.8X-51X | 46-7 | 10X-68X | 35-5 | 15X-101X | 23.5-4 | 20X-135X | 17.6-3 | 31X-203X | 11.8-2 | 41X-270X | 8.8-1.3 |
| 0.75X | 131 | 11.6X-77X | 31-4.7 | 15X-101X | 23.5-3.6 | 23X-152X | 15.7-2.4 | 30.6X-202X | 12-1.8 | 46X-304X | 7.8-1.2 | 61X-405X | 6-0.9 |
| 1.0X | 96 | 15.5X-102X | 23-3 | 20X-135X | 17.6-2.7 | 30.6X-202X | 12-1.8 | 41X-270X | 8-1.4 | 61X-405X | 6-0.9 | 81.6X-540X | 4-0.7 |
| 1.5X | 63 | 23X-154X | 15-2.3 | 31X-203X | 11.8-1.8 | 46X-304X | 7.8-1.2 | 61X-405X | 6-0.9 | 92X-607X | 4-0.6 | 122X-810X | 3-0.4 |
| 2X | 46 | 31X-205X | 11.6-1.7 | 41X-270X | 8.8-1.3 | 61X-405X | 6-0.9 | 81.6X-540X | 4-0.7 | 122X-810X | 3-0.4 | 163X-1080X | 2-0.3 |