

COOKE SPEED PANCHRO SERIES II

| | 18 mm. | | 25 mm. | | 32 mm. | | 40 mm. | | 50 mm. | | 75 mm. | | 100 mm. | |
|--|--|------------------------------------|--|------------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|----------------------------------|
| EQUIVALENT FOCAL LENGTH | 18.00 mm. 0.709 in. | ± 0.20 mm. ± 0.008 in. | 25.00 mm. 0.984 in. | ± 0.25 mm. ± 0.010 in. | 32.00 mm. 1.259 in. | ± 0.32 mm. ± 0.013 in. | 40.00 mm. 1.575 in. | ± 0.40 mm. ± 0.016 in. | 50.00 mm. 1.968 in. | ± 0.50 mm. ± 0.020 in. | 75.00 mm. 2.953 in. | ± 0.75 mm. ± 0.030 in. | 100.00 mm. 3.937 in. | ± 1.00 mm. ± 0.04 in. |
| NUMBER OF LENS ELEMENTS | 9 (7) | | 9 (7) | | 7 (5) | | 7 (5) | | 7 (5) | | 6 (4) | | 6 (4) | |
| TOTAL ANGULAR COVERAGE | | | | | | | | | | | | | | |
| 35 mm. Motion Picture Silent Frame | | | | | | | | | | | | | | |
| Vertical | 54.0° | | 40.4° | | 32.0° | | 25.9° | | 20.8° | | 14.0° | | 10.5° | |
| Horizontal | 69.3° | | 52.9° | | 42.5° | | 34.6° | | 28.0° | | 18.8° | | 14.2° | |
| Diagonal | 80.0° | | 62.0° | | 51.6° | | 42.2° | | 34.4° | | 23.4° | | 17.6° | |
| 35 mm. Motion Picture Sound Frame | | | | | | | | | | | | | | |
| Vertical | 48.0° | | 35.6° | | 28.1° | | 22.6° | | 18.2° | | 12.2° | | 9.1° | |
| Horizontal | 62.8° | | 46.5° | | 38.0° | | 30.8° | | 24.9° | | 16.7° | | 12.5° | |
| Diagonal | 74.0° | | 56.0° | | 46.0° | | 37.6° | | 30.5° | | 20.6° | | 15.5° | |
| 35 mm. Horizontal Double Frame | | | | | | | | | | | | | | |
| Vertical | | | | | | | | | | | | | 14.3° | |
| Horizontal | | | | | | | | | | | | | 21.3° | |
| Diagonal | | | | | | | | | | | | | 25.5° | |
| FRONT DIVERGENT CLEARANCE ANGLE MEASURED FROM LENS AXIS | | | | | | | | | | | | | | |
| (a) 35 mm. Motion Picture Silent Frame | 40.5° | | 31.5° | | 26.0° | | 21.5° | | 17.5° | | 12.0° | | 9.3° | |
| (b) " " " Sound Frame | 37.5° | | 28.5° | | 23.5° | | 19.3° | | 15.8° | | 10.8° | | 8.2° | |
| (c) " " " Horizontal Double Frame | | | | | | | | | | | | | 13.2° | |
| REAR DIVERGENT CLEARANCE ANGLE MEASURED FROM THE LENS AXIS | | | | | | | | | | | | | | |
| (a) 35 mm. Motion Picture Silent Frame | 20.5° | | 15.5° | | 16.5° | | 10.5° | | 5.5° | | 4.5° | | 0.5° convergent | |
| (b) " " " Sound Frame | 16.5° | | 12.0° | | 12.2° | | 6.7° | | 2.5° | | 3.5° | | 2.0° convergent | |
| (c) " " " Horizontal Double Frame | | | | | | | | | | | | | 5.5° divergent | |
| DISTANCE OF THE FRONT NODE FROM THE FRONT SURFACE MEASURED TO THE REAR | 56.59 mm. 2.230 in. | | 56.00 mm. 2.206 in. | | 15.38 mm. 0.605 in. | | 24.62 mm. 0.970 in. | | 30.22 mm. 1.190 in. | | 17.00 mm. 0.669 in. | | 52.00 mm. 2.051 in. | |
| DISTANCE OF THE REAR NODE FROM THE REAR SURFACE | To rear 4.11 mm. 0.162 in. | | To rear 1.80 mm. 0.072 in. | | To front 9.24 mm. 0.364 in. | | To front 11.71 mm. 0.461 in. | | To front 14.62 mm. 0.576 in. | | To front 32.50 mm. 1.281 in. | | To front 24.20 mm. 0.953 in. | |
| CLEAR DIAMETER OF FRONT GLASS | 73.66 mm. 2.90 in. | | 57.70 mm. 2.27 in. | | 18.30 mm. 0.720 in. | | 22.85 mm. 0.90 in. | | 27.40 mm. 1.08 in. | | 38.10 mm. 1.50 in. | | 40.00 mm. 1.574 in. | |
| CLEAR DIAMETER OF REAR GLASS | 14.17 mm. 0.558 in. | | 16.30 mm. 0.641 in. | | 17.40 mm. 0.685 in. | | 20.58 mm. 0.810 in. | | 24.12 mm. 0.950 in. | | 22.40 mm. 0.880 in. | | 32.00 mm. 1.256 in. | |
| OPTICAL BACK FOCAL DISTANCE | 22.57 mm. 0.889 in. | ± 0.025 mm. ± 0.010 in. | 26.80 mm. 1.056 in. | ± 0.025 mm. ± 0.010 in. | 22.74 mm. 0.895 in. | ± 0.32 mm. ± 0.013 in. | 28.30 mm. 1.114 in. | ± 0.40 mm. ± 0.016 in. | 35.36 mm. 1.392 in. | ± 0.50 mm. ± 0.020 in. | 42.60 mm. 1.679 in. | ± 0.75 mm. ± 0.030 in. | 76.00 mm. 2.990 in. | ± 1.00 mm. ± 0.04 in. |
| TOTAL ANGULAR ROTATION OF IRIS RING | $f/1.7$ to $f/22$ 82.0° $\pm 5.0^\circ$ | | $f/1.8$ to $f/22$ 87.0° $\pm 5.0^\circ$ | | $f/2$ to $f/22$ 63.0° $\pm 5.0^\circ$ | | $f/2$ to $f/22$ 74.0° $\pm 5.0^\circ$ | | $f/2$ to $f/22$ 86.0° $\pm 5.0^\circ$ | | $f/2$ to $f/22$ 81.0° $\pm 5.0^\circ$ | | $f/2.5$ to $f/22$ 80.0° $\pm 5.0^\circ$ | |

Depth of Field Tables for Series II Cooke Speed Panchro and Cooke Telepanchro Lenses will be found as under:—
 In Feet Motion Picture Leaflet LEN 180F.
 In Metres Motion Picture Leaflet LEN 180M.