

# HYPERFOCAL DISTANCE CHART

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When you wish to shoot with maximum depth of field, you need to focus on a point known as the Hyperfocal Distance.  
When the camera is focused at this point, everything in the picture should be sharp from half way between it and the camera, to infinity.

|        | f/1.0       | f/1.4       | f/2.0       | f/2.8       | f/4.0      | f/5.6      | f/8.0      | f/11.0     | f/16.0     | f/22.0     | f/32.0     | f/45.0   | f/64.0   |
|--------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|----------|----------|
| 10 mm  | 10.53 m     | 7.44 m      | 5.26 m      | 3.72 m      | 2.63 m     | 1.86 m     | 1.32 m     | 0.93 m     | 0.66 m     | 0.47 m     | 0.33 m     | 0.23 m   | 0.16 m   |
| 12 mm  | 15.16 m     | 10.72 m     | 7.58 m      | 5.36 m      | 3.79 m     | 2.68 m     | 1.89 m     | 1.34 m     | 0.95 m     | 0.67 m     | 0.47 m     | 0.33 m   | 0.24 m   |
| 14 mm  | 20.63 m     | 14.59 m     | 10.32 m     | 7.29 m      | 5.16 m     | 3.65 m     | 2.58 m     | 1.82 m     | 1.29 m     | 0.91 m     | 0.64 m     | 0.46 m   | 0.32 m   |
| 15 mm  | 23.68 m     | 16.75 m     | 11.84 m     | 8.37 m      | 5.92 m     | 4.19 m     | 2.96 m     | 2.09 m     | 1.48 m     | 1.05 m     | 0.74 m     | 0.52 m   | 0.37 m   |
| 16 mm  | 26.95 m     | 19.05 m     | 13.47 m     | 9.53 m      | 6.74 m     | 4.76 m     | 3.37 m     | 2.38 m     | 1.68 m     | 1.19 m     | 0.84 m     | 0.60 m   | 0.42 m   |
| 17 mm  | 30.42 m     | 21.51 m     | 15.21 m     | 10.76 m     | 7.61 m     | 5.38 m     | 3.80 m     | 2.69 m     | 1.90 m     | 1.34 m     | 0.95 m     | 0.67 m   | 0.48 m   |
| 18 mm  | 34.11 m     | 24.12 m     | 17.05 m     | 12.06 m     | 8.53 m     | 6.03 m     | 4.26 m     | 3.01 m     | 2.13 m     | 1.51 m     | 1.07 m     | 0.75 m   | 0.53 m   |
| 20 mm  | 42.11 m     | 29.77 m     | 21.05 m     | 14.89 m     | 10.53 m    | 7.44 m     | 5.26 m     | 3.72 m     | 2.63 m     | 1.86 m     | 1.32 m     | 0.93 m   | 0.66 m   |
| 22 mm  | 50.95 m     | 36.03 m     | 25.47 m     | 18.01 m     | 12.74 m    | 9.01 m     | 6.37 m     | 4.50 m     | 3.18 m     | 2.25 m     | 1.59 m     | 1.13 m   | 0.80 m   |
| 24 mm  | 60.63 m     | 42.87 m     | 30.32 m     | 21.44 m     | 15.16 m    | 10.72 m    | 7.58 m     | 5.36 m     | 3.79 m     | 2.68 m     | 1.89 m     | 1.34 m   | 0.95 m   |
| 28 mm  | 82.53 m     | 58.35 m     | 41.26 m     | 29.18 m     | 20.63 m    | 14.59 m    | 10.32 m    | 7.29 m     | 5.16 m     | 3.65 m     | 2.58 m     | 1.82 m   | 1.29 m   |
| 35 mm  | 128.95 m    | 91.18 m     | 64.47 m     | 45.59 m     | 32.24 m    | 22.79 m    | 16.12 m    | 11.40 m    | 8.06 m     | 5.70 m     | 4.03 m     | 2.85 m   | 2.01 m   |
| 40 mm  | 168.42 m    | 119.09 m    | 84.21 m     | 59.55 m     | 42.11 m    | 29.77 m    | 21.05 m    | 14.89 m    | 10.53 m    | 7.44 m     | 5.26 m     | 3.72 m   | 2.63 m   |
| 45 mm  | 213.16 m    | 150.73 m    | 106.58 m    | 75.36 m     | 53.29 m    | 37.68 m    | 26.64 m    | 18.84 m    | 13.32 m    | 9.42 m     | 6.66 m     | 4.71 m   | 3.33 m   |
| 50 mm  | 263.16 m    | 186.08 m    | 131.58 m    | 93.04 m     | 65.79 m    | 46.52 m    | 32.89 m    | 23.26 m    | 16.45 m    | 11.63 m    | 8.22 m     | 5.82 m   | 4.11 m   |
| 55 mm  | 318.42 m    | 225.16 m    | 159.21 m    | 112.58 m    | 79.61 m    | 56.29 m    | 39.80 m    | 28.14 m    | 19.90 m    | 14.07 m    | 9.95 m     | 7.04 m   | 4.98 m   |
| 60 mm  | 378.95 m    | 267.96 m    | 189.47 m    | 133.98 m    | 94.74 m    | 66.99 m    | 47.37 m    | 33.49 m    | 23.68 m    | 16.75 m    | 11.84 m    | 8.37 m   | 5.92 m   |
| 65 mm  | 444.74 m    | 314.48 m    | 222.37 m    | 157.24 m    | 111.18 m   | 78.62 m    | 55.59 m    | 39.31 m    | 27.80 m    | 19.65 m    | 13.90 m    | 9.83 m   | 6.95 m   |
| 70 mm  | 515.79 m    | 364.72 m    | 257.89 m    | 182.36 m    | 128.95 m   | 91.18 m    | 64.47 m    | 45.59 m    | 32.24 m    | 22.79 m    | 16.12 m    | 11.40 m  | 8.06 m   |
| 75 mm  | 592.11 m    | 418.68 m    | 296.05 m    | 209.34 m    | 148.03 m   | 104.67 m   | 74.01 m    | 52.34 m    | 37.01 m    | 26.17 m    | 18.50 m    | 13.08 m  | 9.25 m   |
| 80 mm  | 673.68 m    | 476.37 m    | 336.84 m    | 238.18 m    | 168.42 m   | 119.09 m   | 84.21 m    | 59.55 m    | 42.11 m    | 29.77 m    | 21.05 m    | 14.89 m  | 10.53 m  |
| 85 mm  | 760.53 m    | 537.77 m    | 380.26 m    | 268.89 m    | 190.13 m   | 134.44 m   | 95.07 m    | 67.22 m    | 47.53 m    | 33.61 m    | 23.77 m    | 16.81 m  | 11.88 m  |
| 90 mm  | 852.63 m    | 602.90 m    | 426.32 m    | 301.45 m    | 213.16 m   | 150.73 m   | 106.58 m   | 75.36 m    | 53.29 m    | 37.68 m    | 26.64 m    | 18.84 m  | 13.32 m  |
| 100 mm | 1,052.63 m  | 744.32 m    | 526.32 m    | 372.16 m    | 263.16 m   | 186.08 m   | 131.58 m   | 93.04 m    | 65.79 m    | 46.52 m    | 32.89 m    | 23.26 m  | 16.45 m  |
| 105 mm | 1,160.53 m  | 820.62 m    | 580.26 m    | 410.31 m    | 290.13 m   | 205.15 m   | 145.07 m   | 102.58 m   | 72.53 m    | 51.29 m    | 36.27 m    | 25.64 m  | 18.13 m  |
| 135 mm | 1,918.42 m  | 1,356.53 m  | 959.21 m    | 678.26 m    | 479.61 m   | 339.13 m   | 239.80 m   | 169.57 m   | 119.90 m   | 84.78 m    | 59.95 m    | 42.39 m  | 29.98 m  |
| 180 mm | 3,410.53 m  | 2,411.61 m  | 1,705.26 m  | 1,205.80 m  | 852.63 m   | 602.90 m   | 426.32 m   | 301.45 m   | 213.16 m   | 150.73 m   | 106.58 m   | 75.36 m  | 53.29 m  |
| 200 mm | 4,210.53 m  | 2,977.29 m  | 2,105.26 m  | 1,488.65 m  | 1,052.63 m | 744.32 m   | 526.32 m   | 372.16 m   | 263.16 m   | 186.08 m   | 131.58 m   | 93.04 m  | 65.79 m  |
| 300 mm | 9,473.68 m  | 6,698.91 m  | 4,736.84 m  | 3,349.45 m  | 2,368.42 m | 1,674.73 m | 1,184.21 m | 837.36 m   | 592.11 m   | 418.68 m   | 296.05 m   | 209.34 m | 148.03 m |
| 400 mm | 16,842.11 m | 11,909.17 m | 8,421.05 m  | 5,954.58 m  | 4,210.53 m | 2,977.29 m | 2,105.26 m | 1,488.65 m | 1,052.63 m | 744.32 m   | 526.32 m   | 372.16 m | 263.16 m |
| 500 mm | 26,315.79 m | 18,608.07 m | 13,157.89 m | 9,304.04 m  | 6,578.95 m | 4,652.02 m | 3,289.47 m | 2,326.01 m | 1,644.74 m | 1,163.00 m | 822.37 m   | 581.50 m | 411.18 m |
| 600 mm | 37,894.74 m | 26,795.63 m | 18,947.37 m | 13,397.81 m | 9,473.68 m | 6,698.91 m | 4,736.84 m | 3,349.45 m | 2,368.42 m | 1,674.73 m | 1,184.21 m | 837.36 m | 592.11 m |