



# Canon Lenses

The CANON LENS has been acclaimed by many experts as the finest lens in its class today.

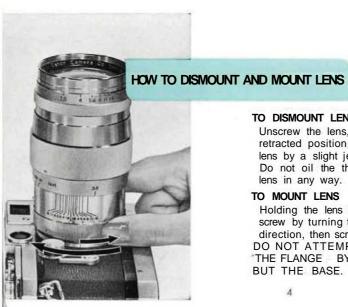
It is a precision instrument as carefully constructed as the CANON CAMERA itself. Treat it with respect. It has been accurately set and aligned by hand and final settings arc made with microscopic alignment instruments. ALL CANON LENSES are rigidly checked for resolving power sand lens aberration—spherical, coma, astigmatic, curvature of field, distortion, chromatic—and color definition. Any lens that does not come up to Canon's very high standards in any one of these tests is immediately discarded. According to the characteristics of the lenses, they are coated either in purple, magenta, or amber in order to obtain true color for color photography.

Do not endeavour to open up the lens. If there is anything wrong, return the lens to your dealer who will forward it to the manufacturers for their attention.

Note: All Canon-Manufactured Lenses (except telephoto lenses: 200. 400, 600, 800 and 1000 which comes with reflex mirror housing) are coupled with the Canon Camera Rangefinder Mechanism.

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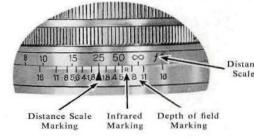
TO DISMOUNT LENS Unscrew the lens, which may be in either extended or retracted position, by grasping its b;tsc. First loosen the lens by a slight jerking motion, then unscrew gently. Do not oil the thread of the lens or tamper with the lens in any way. Always keep the lens flange shaded.

TO MOUNT LENS Holding the lens by its base, find the thread of the screw by turning the [ens slightly in a counter-clockwise direction, then screw clockwise into the flange until light. DO NOT ATTEMPT TO TIGHTEN THE LENS INTO THE FLANGE BY GRASPING ANY OTHER PART BUT THE BASE.

#### INFRARED MARK

Infrared Mark is used only for infrared photography. After focusing in the usual manner, read the object distance scale of the tens, and then turn the lens so that the object distance is exactly opposite the "R" index mark. The lens is now focused for infrared photography.

Infrared mark on any Canon lens is situated in a position where it will offer the best result by using infrared film and infrared filter (such as Kodak IR 135 and Wratten Filter No.87). both having a maximum sensitivity at a wave length of approximately 8000A. Therefore, it is appropriate to shift about 1/3 of the amount to "R" when using, say, Kodak Plus X or regularpanchromatic film with a Wratten filter or about No. 25.



#### **DESCRIPTIONS**



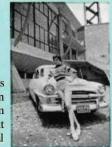
#### How to take care of your lens

- Lenses should not be changed in direct sunlight. Turn your back to the sun and hold the camera in the shadow of your body.
- 2. Always keep the mounting flange of your camera free from dust or dirt. After dismounting, your lens should be covered with the dust cap instantly to protect the helicoid, which is the most important part of the lens.
- 1. Never touch the lens with your finger. In case it becomes necessary to remove dust from the surface, use a fine, soft brush or reliable lens tissue. If further cleaning is necessary for removing fingermarks, etc. wrap lens cleaning tissue or lint-free cotton cloth on tip of a stick and moist alcohol (mixed with ether when possible) and wipe the surface in a gentle circular motion from center to perimeter. Never wipe with excessive pressure or you might scratch the surface.
- 4. Do not store your lens in hot and or humid places. The best way to store your lens is to keep it in an air-tight container or desiccator with moisture absorbent such as silica gel.
- 5. Never subject the lens to a sudden, extreme change in temperature or lens cracks may result,
- 6. Do not attempt to screw-in or unscrew the lens by grasping any other part (especially knurled focusing ring) but the base.

# DIFFERENT LENS EFFECTS

#### 1. CHANGES IN RANGE

Showing the differences in camera range when pictures are laken From the same position but using different focal length lenses.

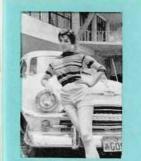




28 mm



35 mm



50 mm



85 mm





25 mm

In different lenses, there is a variance in the degree of clarity and also in their focal lengths. There is, however, a much more important reason for interchanging lenses: that is, to take advantage of the difference in their ranges according to their respective focal lengths. Let US examine this more closely. All of the above photos have been taken from the same position but using lenses of different focal lengths. The shorter the focal length of Che lens, the wider the area covered by the picture, but the objects in those pictures all appear small. The longer the focal length, the narrower the field

covered by the resulting picture, but in these cases the image itself appears bigger. The use of lenses of different focal lengths then becomes a necessity. Tor instance, when we take photos of a group of people in a small room against a blank wall background or when taking a picture of a large building when it is not possible to move back the necessary distance, the use of a lens of small focal length is of advantage. On the other hand when picking out a subject from a large area, and it is not possible to get closer, the use of a long focus or telescopic lens is a beneficial adaption.

#### DIFFERENT LENS EFFECT

#### 2. PERSPECTIVE

Consideration of perspective when taking photos from various distances and keeping the foreground the same size.















25 mm

28 mm

35 mm

50 mm

85 mm

100 mm

135 mm

The above photographs show the different effects obtained by using various focal length lenses. Using the same foreground subject, variations in the size and depth of the surrounding objects arc produced. Looking at these you can see that with the same subject, there is a different background effect in each case. The shorter the focus length of the lens, greater is the exaggeration in the appearance of the foreground in relation to the surrounding area. Again there are marked differences in the degree of the background. With the long distance lens, the background area is stronger and clearly adjusted in

relation to the foreground giving an effect of solidness to the picture. Again, according to the size of the lens opening, there are differences in the depth of the object being photographed. This has advantages, for instance, in producing different effects with background focus, or in using a maximum opening lens to facilitate taking pictures under unfavorable conditions. By selecting the appropriate lens and by taking advantage of its characteristics, you can improve the excellence of your picture.

#### VIEWFINDER VS PARALLAX ADJUSTMENT

As the built-in viewfinder of the camera has no device for parallax adjustment, a separate view-finder is recommended for all lenses except those with normal focal length (50mm and 35mm for Canon Camera Model VT and 50mm for all the other Canon Cameras). A variety of viewfinders are available for Canon Lenses. Among them are:

- (1) For use with Canon Camera Model VT and later models: ZOOM FINDERS "S" and "L" SPECIAL VIEWFINDERS V, LUMI-FIELD VIEWFINDERS. When used on the Camera these finders are mechanically coupled to the built-in rangefinder of the camera and parallax is automatically compensated as the lens is focused.
- (2) For Canon Camera Model IV-S2. II-S and all other cameras prior to Model VT. use SPECIAL VIEWFINDER V, with FINDER COUPLER, which has parallax compensating adjustment. Since cameras prior to model VT arc not mechanically coupled to the viewfinders for parallax, you have to adjust the parallax manually by adjusting the parallax compensating scale of the FINDER COUPLER to match the reading on the DISTANCE SCALE of the lens. By doing so, the field you see through the finder will be identical with what the lens will register on film.

Note: Even those viewfinders which are not designed for Model VT, Canon can be used on the Model VT earners provided that parallax compensation is made manually.



ULTRA-WIDE-ANGLE

CANON LENS

25 mm



LENS ELEMENTS:

LENS MOUNT & HEAD:

NON-COLLAPSIBLE,

NON-REVOLVING

MINIMUM APERTURE: f:22DISTANCE SCALES:  $3.5 \sim 50 \, \text{ft}$ , or  $1 \sim 20 \, \text{m}$ , inf

ANGLE OF VIEW: 82° MAGNIFICATION: 0.5x:

COATING: PURPLE

NET WEIGHT: 142 grams or 5 oz.

A radically new lens giving the unrivalled, full, sharp angle-of-view of 82°. An extremely useful lens for indoor photography or landscape shots. Incorporates new Spectra-coated (TM) rare glass elements permitting the fastest speed ever possible in this focal length, without sacrifice of definition or crisp edge-to-edge quality, even at full opening.



WIDE-ANGLE

CANON LENS

28 mm

f:3.5



light transmission.



LENS ELEMENTS:

LENS MOUNT & HEAD:

MINIMUM APERTURE:

DISTANCE SCALES:

ANGLE OF VIEW:

MAGNIFICATION:

COATING:

NET WEIGHT:

WIDE-ANGLE

NON-COLLAPSIBLE.

NON-REVOLVING

3.5 ~ 50ft or 1 ~ 20m. inf

159 grams or 5.6 oz.

f: 22

0.56x

MAGENTA

75°

CANON LENS



free design.

Embodies new rare glass elements, making possible the fastest aperture design in this wide angle field. No barred distortion or curvature at all lens opening-covers 75° Superb aberration-free and coma-

LENS MOUNT & HEAD: NON-COLLAPSIBLE, NON-REVOLVING MINIMUM APERTURE: f:22 DISTANCE SCALES: 3.5 ~ 50ft, or 1 ~ 20m, inf 75°

ANGLE OF VIEW: MAGNIFICATION:

LENS ELEMENTS:

COATING: NET WEIGHT: PURPLE

0.56x

120 grams or 5.1 oz.

A unique lens of exceptionally wide angle of view and speed. Completely accurate and uniform in



NORMAL WIDE-ANGLE

CANON LENS

35 mm

f: 2.8



Designed on CANON's own formula. Excellent for color and black-and-white negatives.

NORMAL WIDE-ANGLE

CANON LENS



35 mm

World's fastest wide-angle lens (64°). superbly corrected for color definition and curvature-free result at wide open. This lens also features Canon's new Spectra-coating, which gives added brilliance and at the same time improved color quality.

LENS ELEMENTS: LENS MOUNT & HEAD:

NON-COLLAPSIBLE, NON-REVOLVING

MINIMUM APERTURE:

NET

DISTANCE SCALES:  $3.5 \sim 50 \, \text{ft}$ , or  $1 \sim 20 \, \text{m}$ , inf ANGLE OF VIEW: 64°

MAGNIFICATION

COATING: WEIGHT:

 $0.7x \times$ **PURPLE** 

f: 22

125 grams or 4.4 oz.

LENS ELEMENTS:

LENS MOUNT & HEAD : NON-COLLAPSIBLE.

NON-REVOLVING

MINIMUM APERTURE: f: 22

3.5 ~ 50ft, or 1 ~ 20 m. inf

DISTANCE SCALES: ANGLE OF VIEW 64°

MAGNIFICATION: 0.7x COATING: **AMBER** 

NET WEIGHT: 125 4.4 oz. grams or

## NORMAL WIDE-ANGLE CANON LENS

35 mm



LENS ELEMENTS: LENS MOUNT & HEAD:

NON-COLLAPSIBLE.

NON-REVOLVING MINIMUM APERTURE: f: 22

DISTANCE SCALES:  $3.5 \sim 50 \text{ft}$ , or  $1 \sim 20 \text{m}$ , inf

64°

ANGLE OF VIEW:

MAGNIFICATION: 0.7x**AMBER** 

COATING: NET WEIGHT: 185 grams or 6.5 oz. The amazing speed of the f: 15 has won the world wide claim of professional photographers. There is no finer and faster lens with this focal length and field — of — view.



STANDARD

**CANON LENS** 

50 mm



f:2.8

LENS ELEMENTS: LENS MOUNT & HEAD :

ANGLE OF VIEW:

COATING:

NET WEIGHT:

NON-COLLAPSIBLE, NON-REVOLVING

MINIMUM APERTURE: DISTANCE SCALES:

f: 22 3.5 ~ 50ft, or 1~20m, inf

46°

MAGENTA

142 grams or 4.7 oz.

Ideal all-round lens not only for landscapes, portraiture, etc., but also for copying, enlarging work etc. An excellent lens for color as well as blackand-white.



### STANDARD

CANON LENS

LENS ELEMENTS:

LENS MOUNT & HEAD: NON-COLLAPSIBLE. NON-REVOLVING

MINIMUM APERTURE: f

DISTANCE SCALES: 3.5 ~ 50ft, or 1 ~ 20m, inf

ANGLE OF VIEW: 46°

**AMBER** 

COATING: NET WEIGHT: 270 grams or 9.5 oz.



[Improved]

A newly improved-high-speed lens design which reduces spherical aberration to the absolute minimum, eliminating coma and providing an extremely flat image surface. Ideal standard lens for black-and-white and color.



STANDARD CANON LENS

50 mm

LENS ELEMENTS: LENS MOUNT & HEAD. NON-COLLAPSIBLE. NON-REVOLVING

MINIMUM APERTURE: : 16 DISTANCE SCALES:

ANGLE OF VIEW:

 $3.5 \sim 50 \text{ft}$ , or  $1 \sim 20 \text{m}$ , inf

46°

COATING: **AMBER NET WEIGHT:** 

322 grams or 11.4 oz.

first lens faster than f:1.5, which produces a camera image of superb definition and resolution wide open. This lens even surpasses the resolving power of the already accepted leader. Canon's previous 50mm f:1.8. Incorporates new rare-glass elements, permitting its aberration-free performance at all stops. Another Canon revolutionary advance in "Available Light" photography.



LONG-FOCUS

CANON LENS

LENS ELEMENTS:

LENS MOUNT & HEAD: NON-COLLAPSIBLE,

REVOLVING

MINIMUM APERTURE: f: 16 DISTANCE SCALES: 3.5 ~ 100ft, or 1 ~ 30m, inf

ANGLE OF VIEW:

29°

MAGNIFICATION: 1.7x ×

COATING: **MAGENTA** NET WEIGHT: 410 grams or 14.5 oz.

85 mm

f:1.9



Probably the finest lens in its class. Light alloy mount. Ideal for portraiture, excellent resolution; popular with press photographers.



LONG-FOCUS

CANON LENS

LENS ELEMENTS:

LENS MOUNT & HEAD : NON-COLLAPSIBLE,

REVOLVING

MINIMUM APERTURE: : 16 3.5 ~ 100ft, or 1 ~ 30m, inf

DISTANCE SCALES: ANGLE OF VIEW: 29° MAGNIFICATION: 1.7x

COATING: AMBER NET WEIGHT: 730 grams or 25.8 oz. 85 mm



Semi-long-focus lens of CANON's unique design. A light weight lens combining superlative resolution

and speed. An excellent lens for stage shows

and portraiture.

# CANON LENS

**TELEPHOTO** 

3.5 ~ 100ft, or 1 ~ 30m, inf

100 mm

ness.



Lightest lens made from modern light-weight alloy. Recommended for sports, landscapes, and press work. Combines speed ami critical sharp-

LENS ELEMENTS: LENS MOUNT & HEAD: NON-COLLAPSIBLE, REVOLVING MINIMUM APERTURE: f: 22

ANGLE OF VIEW: 24° MAGNIFICATION: 2x COATING: **PURPLE** 

DISTANCE SCALES:

NET WEIGHT: 184 grams or 6.5 oz.

**TELEPHOTO** CANON LENS

LENS ELEMENTS: LENS MOUNT & HEAD:

NON-COLLAPSIBLE.

REVOLVING MINIMUM APERTURE: f: 22

DISTANCE SCALES: ANGLE OF VIEW:

5 ~ 200ft, or 1.5 ~ 60m, inf

18° MAGNIFICATION: 2.7x COATING: NET WEIGHT:

**MAGENTA** 

438 grams or 15.5 oz.

135 mm



Made with exceptionally light alloy. Aberration corrections are nearly

perfect. Recommended for all classes of long-distance and aerial photography.

#### **TELEPHOTO**

200 mm f: 3.5

**CANON LENS** 

LENS ELEMENTS:

LENS MOUNT & HEAD:

NON-COLLAPSIBLE,

REVOLVING MINIMUM APERTURE:

DISTANCE SCALES: 10 ~ 300ft, or 3 ~ 100m, inf-100m, ...

ANGLE OF VIEW

MAGNIFICATION: COATING: **PURPLE** 

MIRROR BOX, FOCUSING LENS, LENS HOOD, UV FILTER, DOUBLE CABLE RELEASE, LEATHER CARRYING CASE

A telephoto lens with magnification of 4x, this lens is preferred by photographers who need a more powerful magnification than the 135mm lens offers. In speed and resolution, it equals the Canon 135mm lens. Combined with the mirror box, which is supplied with the lens, it enables one to use a Canon Camera as a single-reflex camera. The mirror box is identical to the one for the 400mm lens.

#### DEPTH OF PHOTOGRAPHIC FIELD

When a lens is brought into focus on any one subject, [here is a certain surrounding area which also will appear in focus. This area can be evaluated from the distance scale calibrations. For instance, if we were to calculate it using a 50mm lens brought into focus on an object 25ft away, and using an f:4 aperture, the area of photographic depth would be an area on both sides shown on the scale 1x4. That is in this case, an area approximately between 18ft and 40ft. Everything within this area would be in accurate focus. In the same manner, with an aperture reading of f:11, an area 12ft to infinity will be clearly seen.



f : 11

The photographic depth is deeper according to the smallness of the size of the aperture and the longer the distance of the subjects from the camera. This depth under converse conditions would become shallower. Depth of field 18 ft - 40 ft 50mm LENS

> focused at 25 ft Depth of field 12 ft - 00

focused at 25 ft

## DEPTH OF FIELD DATE ON ALL **LENSES** CANON



FRONT ATTACHMENT FOR ZOOMFINDER II & ZOOMFINDER S

#### DEPTH OF FIELD IN FEET

| Distance |         |         |         |        | (       | Circle  | of Co   | nfusio  | n = 0.0 | 35     |         |       |         | - 50  |
|----------|---------|---------|---------|--------|---------|---------|---------|---------|---------|--------|---------|-------|---------|-------|
| of       | 1:      | 3.5     | f:      | 4      | f :     | 5.6     |         | 8       | 1.      | 11     | f.      | 16    | f t     | 22    |
| #        | ft-in   | ft-in   | ft-in   | ft-in  | ft-in   | ft-in   | ft-in   | ft-la   | ft-in   | ft-in  | ft-in   | ft-in | ft-in   | f1-se |
| -        | 17-7    | -       | 15-5    | 4      | 11-1    | -       | 7-73/4  | -       | 5-81/2  | -      | 3-115/4 | -     | 2-111/4 | -     |
| 50       | 13-0    | -       | 11-9    | -      | 9.1/2   | -       | 6-81/4  | -       | 5-7/6   | in.    | 3-71/2  | -     | 2-81/2  | -     |
| 25       | 10-4    | -       | 9-61/6  | -      | 7-8     | -       | 5-117/8 | -       | 4-71/2  | -      | 3-42/4  | -     | 2-7     | *     |
| 1.5      | 8-15/8  | 101     | 7-75/8  | -      | 6-43/4  | -       | 5-13/4  | -       | 4-15/4  | 960    | 3-11/2  | 100   | 2-51/e  | 100   |
| 10       | 6-5     | 22-11   | 6-11/4  | 28-1   | 5-31/2  | 103     | 4-47/8  | 100     | 3-8     | -      | 2-101/e | -     | 2-31/8  | -     |
| 8        | 5-61/2  | 14-6    | 5-33/4  | 16-5   | 4-81/4  | 28-5    | 3-113/a | -       | 2-41/a  | in .   | 2-8     | -     | 2-13/4  | -     |
| 6        | 4-61/6  | 8-117/4 | 4-43/0  | 9-81/W | 3-111/4 | 12-10   | 3-51/6  | 25-5    | 2-11//2 | 4      | 2-5     | -     | 1-117/4 | w     |
| 5        | 3-111/a | 6-103/4 | 3-93/4  | 7-31/4 | 3-57/4  | 8-111/4 | 3-11/6  | 13-7    | 2-81/2  | 39     | 2-3     | -     | 1-101/2 | of    |
| 4        | 3-31/4  | 5-11/4  | 3-21/2  | 5-37/8 | 2-111/4 | 6-15/a  | 2-817.  | 7-115/a | 2-43/4  | 12-10  | 2-3/8   | **    | 1:81/0  | -     |
| 3.5      | 2-112/s | 4-33/4  | 2-101/4 | 4-51/2 | 2-81/8  | 5-1/a   | 2-51/2  | 6-2     | 2-25/a  | 8-81/4 | 1-107/8 | 27-6  | 1-75/2  | -     |

25 mm



ZOOMFINDER S FOR WIDE ANGLE LENS

DEPTH OF FIELD IN METERS

| Distance |       |        |       |        | Ci    | rcle o | Con   | fusion | 0.03  | 5      |       |       |       |     |
|----------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-----|
| gar.     | F.s.  | 3.5    | 1     | : 4    | f.    | 5.6    | •     | 8      | f :   | 11     | f :   | 16    | f:    | 2.2 |
| 203      | · m   | m      | m     | m      | m     | m      | m     | m      | m     | m      | m     | m     | m     | m   |
| ***      | 5.400 |        | 4.700 | -      | 3.400 | 100    | 2.400 | int    | 1.740 | ***    | 1.211 | -     | 0.875 |     |
| 20       | 4.200 |        | 3,800 | -      | 2.900 | -      | 2.100 | 188    | 1.580 | - 000  | 1.122 | +40   | 0.835 | -   |
| 10       | 3.500 | 100    | 3.200 | See:   | 2.300 | 201    | 1.910 |        | 1.471 | See    | 1.066 | 100   | 0.804 | -   |
| 7        | 3.000 | 22     | 2.800 | -      | 2.200 | No.    | 1,720 | W      | 1.368 | 366    | 1.022 | 460   | 0.780 | 901 |
| 5        | 2.600 | 74.000 | 2.400 | -      | 2.000 | -      | 1.610 | ,,,,   | 1.290 | ···    | 0.969 | 46    | 0.749 | -   |
| 4        | 2.300 | 15.600 | 2.200 | 26.600 | 1.849 | ~      | 1.500 |        | 1.215 |        | 0.972 | 444   | 0.724 | 140 |
| 3        | 1.940 | 6.700  | 1.840 | 8.200  | 1,600 | 26.900 | 1.360 | 467    | 1.107 | 300    | 0.864 | -     | 0.686 | -   |
| 2.5      | 1.720 | 4.600  | 1.650 | 5.300  | 1.450 | 9.500  | 1.229 | *      | 1.034 |        | 0.820 | -     | 0.659 | -   |
| 2        | 1,470 | 3.150  | 1.416 | 3.400  | 1.268 | 4.800  | 1.098 | 12,460 | 0.941 | -      | 0.761 | -     | 0.621 | -   |
| 1.75     | 1.331 | 2.560  | 1.287 | 2.750  | 1.165 | 3,600  | 1.020 | 6.470  | 0.884 | -      | 0.724 | -     | 0.596 | -   |
| 1.50     | 1.183 | 2.060  | 1.149 | 2.170  | 1.052 | 2.670  | 0.933 | 3.960  | 0.818 | 10.470 | 0.680 | -     | 0.567 | *   |
| 1:25     | 1.024 | 1.706  | 0.998 | 1,677  | 0.924 | 1.945  | 0.832 | 2.561  | 0.741 | 4.260  | 0.627 | *     | 0.531 | -   |
| 1.0      | 0.852 | 1.213  | 0.834 | 1.251  | 0.783 | 1.391  | 0.717 | 1.675  | 0.649 | 2.254  | 0.561 | 5.391 | 0.484 | -   |

25 mm

| Distance<br>locused |            |      |     |     |      |   |     |     |      |     |      |     |     |      |        |     | C    | irc | le  | of    | Co | nfu  | sie | on | 0.   | 03 | 5   |     |       |    |      |         |                    |      |
|---------------------|------------|------|-----|-----|------|---|-----|-----|------|-----|------|-----|-----|------|--------|-----|------|-----|-----|-------|----|------|-----|----|------|----|-----|-----|-------|----|------|---------|--------------------|------|
| esn                 | 2          |      |     | 2.8 |      | 1 |     |     | 3.   |     |      |     |     | 1    |        | Г   | -    | 1   | 5.6 |       |    | -    |     | 8  |      |    | 1   | 11  |       | Г  | 1.   | 16      | f.                 | 22   |
| 0                   |            | t-in | ,   | - 1 | t-ic |   | f   | in. |      | fi- | e    | n   | -in |      | ft-in  | 1   | t-in | r.  | 11  | -in   |    | tila |     | 11 | in   | 11 | -in | 1   | t-in  | 1  | t-in | ft-ir   | firin              | frie |
|                     | 27-        | 4    | 574 |     | -    | 2 | 2-  | 1   | T    | -   |      | 19  | 41  | 12   | -      | 13  | -10  | 1/2 | 6   |       | 9. | 91   |     | ,  |      | 7. | 2   | T   |       | 4  | 117/ | -       | 3-6                | -    |
| 50                  | 17-        | 9    | 40  |     | -    | 1 | 5-  | 4   | 1    | -   |      | 13- | 115 |      | -      | 10  | -10  | 1/4 |     | -     |    | 13   |     |    |      |    | 21/ |     | _     |    | 83%  |         | 3- 41/             |      |
| 25                  | 13-        | 1    | 10  |     | we   | 1 | 1-  | 917 |      | -   |      | 10- | 111 | -    | -      | 8   | -11  | 1/2 |     |       | 7. |      | 4   |    |      |    | 61  | 7   |       | 4- | 115  | -       | 3- 2               |      |
| 1.5                 | <b>p</b> - | 91   | 7.0 | 12- | 7    | b | B-1 | 17/ | . 40 | -   |      | n   | 67  | 16   | p.     | 7   | - 3  | 174 | 3   | nei . | 5- | 111  | ,   |    |      |    | 102 | п.  |       |    | 877  |         | 2-1102             |      |
| 10                  | 7-         | 4    | 1/4 | 15- | 61/  |   | 6-1 | 137 | . 10 |     | 1/2  | 6-  | 73  | 4 20 | 41/5   | 5   | -10  | 3/4 | 35- |       | 4  | 117  |     |    | 2    |    | 21/ | 1   | ~     | 1  | 41.  | -       | 2- 854             | 100  |
| 8                   | 6          | 2    | 1/4 | 17- | 21/  |   | 5-1 | 11/ | 12   |     | 11/2 | 1   | 81  | 1:   | - 51/4 | 5   | - 1  | 27. | 18- | 527.  |    | 53   | η.  | 3. |      |    | 97/ | 1   |       |    | 11/4 |         |                    |      |
| 6                   | 4          | 111  | 7.  | 7-  | 71/  |   |     | 91/ |      |     | 111  | 4-  | 71  |      | - 61/4 | 1   |      |     |     |       |    |      | 1   |    | 3/4  |    | 3/1 |     |       |    | 9774 |         | 2- 31.             |      |
| 5                   | 4          | 3    | 1.  | 6-  | 3/   |   | 4-  | 10/ |      | -   | 11/2 | 4   | 1   |      | 74     | 100 |      |     |     | 1137  |    |      | 1   |    | 17/4 |    | 411 | 1   | 101/2 |    |      |         | 2- 17/4            |      |
| 4                   | 3-         | 61   | 74  | 4-  | 71/  |   | 3-  | 51/ |      | - 4 | 7/8  | 3-  | 41  |      | -111/6 |     |      |     |     |       |    |      |     |    |      |    |     | 1.5 |       | -  |      | 19- 1/4 | 11/1/19            |      |
| 3.5                 |            |      | - 1 |     | 11%  |   |     |     |      |     |      |     |     |      | - 21/1 |     |      |     |     |       |    |      | 48  |    | 1001 |    |     | 100 |       |    |      | 11- 3/4 | THE REAL PROPERTY. |      |

28 mm

#### DEPTH OF FIELD IN METERS



LUMI - FIELD FINDER V

Circle of Confusion = 0.035 f : 2.8 2.5 1.935 3.541 1.840 3.925 1.770 4.275 1.590 5.980 1.375 15.065

28 mm

SPECIAL

FINDER V

| Distance<br>focused |     |       |     |      |     |      |     |       |     |      |     |       |     |      | E    | ept   | h e | of F  | iele | I To  | ble |       |     |      |       |     |          |     |      |        |   |       |     |      |
|---------------------|-----|-------|-----|------|-----|------|-----|-------|-----|------|-----|-------|-----|------|------|-------|-----|-------|------|-------|-----|-------|-----|------|-------|-----|----------|-----|------|--------|---|-------|-----|------|
| 69                  |     | f :   | 1.8 | 1    |     | f.   | 2   |       |     | f :  | 2.8 |       |     | f.   | 4    |       |     | f :   | 5.6  |       |     |       | . 8 |      |       | 1 2 | 11       |     | f :  | 16     | Т | fi    | 22  | _    |
| b                   | ft  | -le   | -   | t-in | f   | -in  | +   | t-la  | ft  | -in  | ft  | -in   | -   | i-in | - 11 | -in   | 1   | t-in  | 1    | t-in  | ħ   | -in   |     | t-in | ft-i  | n   | ft-in    | Ð   | -in  | ft-in  |   | t-in  | ft  | i-In |
| -                   | 65- | 101/4 |     | -    | 19- | 31/2 | 10  | -     | 43- |      |     | -     | 29- | ٠    | -    | -     | 21- | 32/   |      | -     | 15- |       |     | -    | 10-11 | 1/2 |          | 7-  | 711  | -      | 5 | 71/4  |     |      |
| 50                  | 28- | 53/4  |     | -    | 22- | 21/4 | 18  | -     | 23- |      | 1   |       | 18- | 81/. |      | -     | 14- | 111/  |      | -     | 11- | 61/4  | ļ,  | -    | 8-11  | 1/2 | -        | 6-  | 61/  | -      | 4 | -11%  |     |      |
| 25                  | 18- | 21/4  | 40- | 117  | 17- | 77/4 | 42- | 117/4 | 15- | 91/  | 60- |       | 13- | 73/4 | 155  |       | 10- | 495   |      | -     | 9-  | 47/4  |     | -    | 7-7   | 2/4 | ~        | 5-  | 977  | -      | 4 | 61/1  | 4   |      |
| 15                  | 12- | 31/4  | 19  | 4    | 11- | 1175 | 19- | 115/4 | 11- | 2    | 23- | 1/4   | 10- | 2/4  | 29   | 11    | 8-  | 10%   | 19-  | 10    | 7-  | 63/4  |     | un.  | 6-4   | 1/4 |          | 5-  | 7)   | -      | 4 | - 1   |     |      |
| 10                  | 1-  | 41.4  | 11- | 82%  | 8   | 73/4 | 11- | 175/4 | 8-  | 73/  | 12- | 172.  | 7-  | 67/2 | 14-  | 105   | 6   | 101/2 | 18-  | 67/6  | ó-  | 27    | 29- | 4    | 5- 3  | 1/2 | 110-     | 4-  | 41/2 |        | 3 | 71/2  | 24  | e.   |
| п                   | 7-  | 2     | 9-  | 3/4  | 7-  | 1    | 9-  | 21/6  | 6-  | 91/  | 9-  | 93/8  | 6-  | 40%  | 10   | 93    | 5   | 101/  | 12-  | 71%   | 5-  | 32/8  | 16- | 91/4 | 4- 8  | 1/4 | 28- 71/2 | 3-1 | 11/2 | **     | 3 | 4     | -   |      |
| 6                   | 5-  | 61/4  | 6-  | 67/4 | 5-  | 51 . | 6-  | 71/4  | 5-  | 31); | 6   | 111/4 | 5-  | 172  | 7    | - 31/ | 4   | 87/   | 8-   | 250   | 4-  | 41/1  | 9-  | 91/. | 3-11  | 2/4 | 12-10    | 3-  | 5    | 27- 1  | 2 | 111/2 |     | *    |
| 5                   | 4-  | 8     | 2   | 43/  | 4-  | 7%   | 5-  | 51/8  | 4-  | 61/  | 5-  | 71/2  | 4-  | 37/1 | 5    | 1177  | 4   | 117   | 6-   | 51/4  | 3-  | 93/4  | 7-  | 4    | 2- 6  |     | 8-101/4  | 3-  | 1    | 13-103 | 2 | 81/2  | 43- | 9    |
| 4                   | 3-  | 91/2  | 4   | 27/1 | 3-  | 91/4 | 4   | 31/4  | 3-  | 81/  | 4-  | 41/4  | 3-  | 63/4 | 4    | 61/   | 3-  | 5     | 4    | 101/6 | 3-  | 17/4  | 5-  | 37/6 | 2-11  | 1/4 | 6- 11/4  | 2-  | 81/4 | B- 1   | 2 | 41/2  | 13- | 14)  |
| 3.5                 | 3-  | 41)   | 3-  | 81%  | 3-  | 37/4 | 3-  | 81/6  | 3-  | 31/  | 3-  | 92/1  | 3-  | 2    | 3-   | 11    | 3-  | 5/1   | 4    | 11/2  | 2-1 | 105/6 | 4   | 51/2 | 2- 0  | 1/2 | 4-119/4  | 2-  | 51/2 | 6- 21  | 2 | 237.  | 8-  |      |

35 mm

CANON LENSES 35 mm

2.8 and f: 1.8

## DEPTH OF HELD IN METERS





(SCREW-IN TYPE)

| Outement<br>Incomed |        |        |        |        |        |        |       | Circle | e of ( | Confus | ion C | 0.035  |       |        |       |        |       |       |
|---------------------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|-------|--------|-------|--------|-------|-------|
| -pre                | f :    | 1.8    | 1      | 2      | f:     | 2.8    | 1     | 4      | 11     | 5.6    | f.    | 8      | f :   | 11     |       | 16     | f:    | 22    |
|                     | m      | m      | m      | m      | m      | m      | m     | m      |        | m      | m     | m      | m     | m      | m     | m      | m     | m     |
| -                   | 20.071 | -      | 18.071 | -      | 12.900 | -      | 9.000 | -      | 6.400  |        | 4.500 |        | 3.200 | -      | 2,300 | -      | 1,600 | -     |
| 20                  | 10.034 | -      | 9.508  | -      | 7.850  |        | 6.250 | -      | 4.900  | -      | 3.700 | *      | 2.850 | *      | 2.050 | -      | 1.550 | -     |
| 10                  | 6.693  | 19.831 | 6.456  | 22.268 | 5.660  | 43.780 | 4.770 | *      | 3.950  | -      | 3,140 |        | 2.510 | -      | 1,880 | -      | 1.440 | -     |
| 7                   | 5.207  | 10.696 | 5.063  | 11.363 | 4.560  | 15.140 | 3.976 | 30.300 | 3.390  | -      | 2.780 | -      | 2,270 |        | 1.740 | -      | 1.370 | -     |
| 5                   | 4.017  | 6.626  | 3.921  | 6.875  | 3.620  | 8.090  | 3,240 | 11,010 | 2.850  | 21.320 | 2.400 | -      | 2.020 | *      | 1,590 | -      | 1.270 | -     |
| 4                   | 2.348  | 4.971  | 3.259  | 5.109  | 3.070  | 5.750  | 2,800 | 7.070  | 2.500  | 10.230 | 2.150 | 31-290 | 1.840 | -      | 1,490 | -      | 1.200 | -     |
| 3                   | 2.620  | 3.510  | 2.584  | 3.577  | 2.450  | 3.875  | 2.270 | 4,421  | 2.070  | 5,480  | 1.830 | 8.525  | 1,600 | 28.300 | 1,325 | -      | 1,100 | -     |
| 2.5                 | 2.232  | 2.842  | 2,206  | 2.885  | 2,110  | 3.075  | 1.975 | 3.410  | 1.825  | 3,995  | 1,635 | 5.390  | 1,450 | 9.600  | 1.220 | **     | 1.025 | -     |
| 2                   | 1.827  | 2.210  | 1.809  | 2.237  | 1.745  | 2.345  | 1.655 | 2.535  | 1.545  | 2.845  | 1.410 | 3.475  | 1.270 | 4.820  | 1.095 | 13.815 | 0.935 | -     |
| 1.75                | 1.617  | 1.908  | 1.603  | 1.927  | 1.550  | 2.010  | 1.480 | 2.145  | 1.395  | 2.355  | 1.265 | 2.770  | 1.170 | 3,555  | 1.015 | 6.795  | 0.880 | -     |
| 1.5                 | 1.402  | 1,613  | 1.392  | 1.627  | 1.354  | 1.683  | 1.299 | 1.777  | 1.234  | 1.919  | 1,147 | 2.182  | 1.055 | 2.635  | 0.931 | 4.050  | 0.817 | 11.59 |
| 1.25                | 1.182  | 1.326  | 1.175  | 1.336  | 1.148  | 1.373  | 1,109 | 1.433  | 1.062  | 1.523  | 0.998 | 1,681  | 0.928 | 1.934  | 0.832 | 2,587  | 0.741 | 4.3   |
| 1                   | 0.957  | 1.047  | 0.952  | 1.053  | 0.935  | 1,075  | 0.910 | 1.111  | 0.878  | 1.163  | 0.835 | 1,251  | 0.787 | 1.382  | 0,718 | 1,678  | 0.651 | 2.2   |

35 mm

| Same or<br>secured |     |           |     |    |      |     |              |      |            | _   |      |           |      |            |     |       |     |       |       |      |       |      |        | 1   | Depti | 1 0 | f F   | iel | i T  | able | 0    |      |        | _     |      |       |      |       |      |       |      |       |         |     |      |     |      |       |
|--------------------|-----|-----------|-----|----|------|-----|--------------|------|------------|-----|------|-----------|------|------------|-----|-------|-----|-------|-------|------|-------|------|--------|-----|-------|-----|-------|-----|------|------|------|------|--------|-------|------|-------|------|-------|------|-------|------|-------|---------|-----|------|-----|------|-------|
| B.                 | L   | f<br>H-1r |     | 2  | in.  | -   | f.<br>Italia | . 1  | d<br>fe-li |     |      | l<br>h-in | 1 12 | s<br>fr in | 1   | f i   | 1.0 | i la  | 164   | 1    | 2 0.5 | J    | tr.    |     | 2.A   |     |       |     | 4    | 20   |      |      | 5.6    |       | 100  | .0    |      |       | 1/10 | , fre | 11   |       |         | 16  |      |     | 11   | 22    |
|                    |     |           | -   | -  |      | -   |              | -    | -          | -   | -    | 1790      | -    |            |     | 700   | - 1 |       | 1111  | -    | 11-1  | ,    | 1111   | in  | B-1   |     | .,,   | ·in |      | -in  | . 11 | le . | 111    | je.   | - 11 | ile . | *    | řit.  | . ** | c)e   | 11:  | Say   | 11-14   | ,   | 1-10 | P)  | in   | 41.1  |
|                    | 204 |           | 1   |    | •    | 179 |              |      |            | 1   | 167- |           |      | -          | 129 |       | 2   | -     | 128-  |      | *     |      | 9-     | 1   | +     | 1   | 13-   |     | - 0  | -    | 44-  | 9    |        |       | 11:  |       |      |       | 22-1 | 1     |      | ı     | 5- 9    |     |      | 11- | 67/4 | -     |
| 10 *               | 40  |           |     |    | ٠    | 10  | - 1          | 41   | . 1        |     | 38-  | 1         | F1-  |            | 36  | 10    | 74- |       | 31-10 |      | 13-   | 5    | 2 -2   | d   | 13-   | 3   | (7:11 | 0.0 | 140- |      | 231  |      | н      |       | 19-  | 1     | ,    |       | 19-  |       |      |       | 2-1     |     |      | 41  |      | in.   |
| 25                 | 21  |           | 1   | 0+ | 1    | 21  | -11          | 21   | + 1        |     | 21   | 10        | 29   |            | 21  | 1     | 30- | 4     | 20-11 |      | 11-1  | 1    | 1-7    |     | 24- 6 |     |       |     | 41-  | 3    | 14-  | 2    | 14-    |       | 14-  |       | 119- |       | 12   | 1     | *    |       | y- w    |     |      |     | 1904 |       |
| 13                 | 14  | . 0       |     | 6- | 2    | 13  | -10          | 14   | - 4        |     | 13   | 10        | 14-  |            | 13  | ,     | 10- | ,     | 12- 1 |      | 4-11  | 1    | 2-11   |     | 17-11 | 1   | 21.3  | 0   | 19:  | r    | TTo: | 4    | 22 . 1 | 5     | 10+  | 3     | 24-  | 2     | 90   | 2     | 2-1  |       | 7- 91/2 | 247 |      | 4   | 60%  | 100   |
| 10                 | 1   |           | 100 | 01 | ٠    | *   | + #1         | . 10 | - 7        |     | *    | X1/       | 10   | ×          |     | 410   | 10- | ٠     | 9-1   | 26   | 0-10  |      | j.     | u)  | 11-2  |     | 1-1   | e.  | 11-  | 10   | 1-   | 3    | 12-10  | 6     | *    |       | 14-  |       | 70   | î     | r- 4 |       | - 3     | 24- |      | 41  |      | 45-   |
|                    | 7   |           | 1,5 |    | 2*)  | 7   |              |      |            | 1/4 | 7    | 31/       |      | 1.65       | 7   | 7     |     | \$1/4 | 7- 6  | 11/4 |       | 147  | 7-4    | d   |       | W   | 7-1   | ů,  | ,    | 1    | 8-1  | ٥٠.  | 10     | 73%   | F    | E-75  | 10-  | ,     | ¥-   | 1/4   | (2-  |       | 1-1     | 10  | 7    | 41  | 0.   | 22-10 |
| *                  | 1   | -10       |     | *  | 21/4 |     | *1           |      | - 2        | 174 |      | 49,       |      | 210        |     | 97/4  | 4-  | 1     | 5.5   |      | 6- 4  | 10   | 1-7    | 94  | 0.4   | NA: | 3/14  | O   | *    | 2.   | 1-   | 415  | A-10   | p tie | 51   | 11%   | 1    | 201   | 4.1  | ő     | 2-11 | illa. | - 214   |     |      |     | 10 . | 11- 2 |
| \$                 |     | -10       | 13  | 1- | 11/2 |     | 10%          | 1    | +.4        | Νįψ | 4    | 101       | . 2- | 010        |     | 101/4 | 1   | 2     | 4.4   | 1/4  | 1-2   | 4    | . ,    | ia. | 5- 3  | 1/4 | . 1   | ii. |      | 414  |      | 410  | 5-1    |       |      | 00    | 1    | 101/4 | 41   | 21/4  | A- 2 |       | 2-101   | 7   | n,   | 2-  | ,,,  | 1-2   |
| À.                 | 1   | 611       | 4   | 4  | ì.   | 2   | 1.1          |      | - 1        |     | 1    | 11        |      | ï          | 3   | 101   | +-  | 11/4  | 2-10  | 44   | +1    | Vy : | 2-10   | W.  | 4.2   |     | 7- 1  | no. | 4    | 25)  | 2-   | 174  | 41.4   | 696   | 3+1  | 77.0  |      | *54   | 21   | 81/4  | + 1  | 170   | 3- 3%   |     | 31/4 | 1   |      | 5- 8  |
| 2.8                | 1   | - 3       | 10  | 3- | 6779 | 3   | 11           | . 2  | - 6        | 14  | 3    | 10        | 3-   | 416        | 5   | 21/4  | 20  | 47,6  | 31.6  |      | 31.7  | 1    | pr (4) | Oc. | 21.9  | 100 | 5 4   | o l | 3    | 874  | 9-3  | 170  | 5. 1   |       |      | 00    | 40   | 0.    | 40   | 1114  | 400  |       | 2-111   | 02  | 411  |     |      |       |

50 mm

1111

CANON LENSES 50 mm

## f:2.8, f:1.8 and f:1.2

#### DEPTH OF FIELD IN METERS

| Tistance<br>locused |        |        |           |        |         |         |        |        | C      | ircle  | of Co  | nfusio | n=0.0  | 35     |        |        |       |        |       |        |       | -      |       | 1     |
|---------------------|--------|--------|-----------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|-------|-------|
| on                  | 11     | 1.2    | t.        | 1.4    | 11      | 1.5     | 1.     | 1.8    | 1      | , 2    | f i    | 2.8    | 1.     | 4      | 11     | 5.6    | -     | . 8    |       | 1      |       | 16     | 1     | 22    |
| m                   | m      | m      | m         | -      | m       | m       | m      | m      | m      | m      | m      | m      | m      | m      | :m:    | m      | m     | m      | m     | m      | . m   | m      | m     | m     |
| -                   | 63.400 | -      | 54.300    |        | 50.700  | -       | 42.300 | -      | 38.000 | -      | 27.200 |        | 19,000 | -      | 13.600 | -      | 9,500 | -      | 6.900 | -      | 4.800 | -      | 3.561 | 100   |
| 20                  | 15.200 | 29,200 | 14.600    | 31.600 | 14.400  | 12.900  | 13.600 | 37.750 | 13,150 | 41,900 | 11.550 | 74.600 | 9.800  | -      | 8,150  |        | 6.500 | -      | 5.200 | *      | 3.900 | -      | 3.049 | 49    |
| 10                  | 8.640  |        | F-2555551 | 12.240 | 8.380   | 12,410  | 8:180  | 13.040 | 7.950  | 13.500 | 7.340  | 15.700 | 6.590  | 20.800 | 5.810  | 36.720 | 4,930 | -      | 4.140 |        | 3.280 | -      | 2.666 | -     |
| 7                   | 8,310  | 7:860  | 6.216     | 8.030  | 8.170   | 8.090   | 6.020  | 8.360  | 5.930  | 8.540  | 5.590  | 9,370  | 5.150  | 1.960  | 4.660  | 14.170 | 4.080 | 25.370 | 3.530 |        | 2.890 | -      | 2:349 | .00   |
| 4                   | 4.640  | 5.420  | 4.580     | 5.500  | 4.560   | 5.530   | 4.490  | 5.650  | 4.440  | 5.730  | 4.240  | 6.090  | 3.000  | 6.720  | 3.690  | 7.790  | 3.320 | 10.280 | 2.950 | 17.020 | 2,490 |        | 2.130 | -     |
| 2                   | 3.770  | 4.270  | 3,730     | 4.310  | 3.720   | 4.330   | 3.670  | 4.400  | 3.630  | A.450  | 3.500  | 4.600  | 3,330  | 5.020  | 3,120  | 5.590  | 2.850 | 6.740  | 2.580 | 9.100  | 2.220 | 21.980 | 1.935 | -     |
| 3                   | 2.870  | 3,150  | 2.850     | 3.170  | 2.840   | 3,180   | 2,810  | 3,215  | 2.790  | 3.245  | 2.718  | 3.350  | 2,610  | 3.532  | 2.480  | 5.800  | 2.310 | 4.295  | 2.136 | 5.130  | 1.885 | 7.605  | 1.679 | 17.85 |
| 2.5                 | 2.410  | 2.600  | 2.590     | 2.620  | 2.390   | 2.620   | 2.370  | 2.645  | 2.355  | 2.665  | 2.300  | 2.735  | 7.225  | 2,855  | 2.135  | 3.025  | 2,005 | 3.325  | 1.870 | 3,800  | 1.680 | 4.959  | 1,519 | 7,89  |
| 2                   | 1.940  |        |           | 2.070  | 1.930   | 2,075   | 1.915  | 2,090  | 1.905  | 2.100  | 2,875  | 2.145  | 1.825  | 2.215  | 1.760  | 2,315  | 1,675 | 2.485  | 1.580 | 2.735  | 1.445 | 3.295  | 1,329 | 4,29  |
| 1.75                | 1.704  | 1,798  | 1         | 1.805  | 1.695   | 1.805   | 1.685  | 1.820  | 1,680  | 1.825  | 1.655  | 1.860  | 1.615  | 1.910  | 1.565  | 1.985  | 1.500 | 2,105  | 1.425 | 2.280  | 1.315 | 2.650  | 1.220 | 3.24  |
| 1.5                 | 1.466  | 1.535  | - Irecond | 1.541  | 1.461   | 1,541   | 1.454  | 1.550  | 1.449  | 1.555  | 1.429  | 1.579  | 1.401  | 1.615  | 1,365  | 1.066  | 1.314 | 1,750  | 1.257 | 1,867  | 1,171 | 2.103  | 1,098 | 2.44  |
| 1.25                | 1.226  |        |           | 1.278  | 1.724   | 1.278   | 1.218  | 1.283  | 1.215  | 1.287  | 1.202  | 1.303  | 1.182  | 1.327  | 1.157  | 1.261  | 1.121 | 1.414  | 1.080 | 1.468  | 1.017 | 1.631  | 0.966 | 1.87  |
| 1                   | 0.985  | 1,015  |           | 100000 | ALCO DE | 1000000 | 10000  | 1.021  | 0.978  | 1.023  | 0.970  | 1.032  | 0.957  | 1.047  | 0.941  | 1.067  | 0.918 | 1.099  | 0.891 | 1,141  | 0.850 | 1.220  | 0.816 | 1:31  |

50 mm

50 mr

| Distance<br>Incomed |          |         |          |         |          |         |          | Circle  | of Co  | nfusion  | 0.035  |          |         |          |          |          |          |        |         |        |
|---------------------|----------|---------|----------|---------|----------|---------|----------|---------|--------|----------|--------|----------|---------|----------|----------|----------|----------|--------|---------|--------|
| -gos                | 1.1      | 1.5     | 1.       | 1.9     | t i      | 2       | 1.       | 2.8     | -      | . 4      |        | 5.6      |         | . 8      | 1.       | 31       | 1.       | 16     | f v     | 22     |
| Н:                  | filin    | fisin   | frin     | ft-in   | frie     | ft-in   | ft-in    | ffile   | ft-in  | fi-let   | ft-in  | ft-in    | ft-in   | ft-in    | #in      | ft-in    | Him      | ft-in  | Orin    | ft-m   |
|                     | 441-     | 14      | 349-     | -       | 330-     | -       | 236-     | -       | 166-   | -        | 110-   | -        | 83-     | -        | 60- 6    |          | 41- 95/4 |        | 30-7    | 140    |
| 100                 | 88-      | 129-    | 77-10    | 141-    | 76-11    | 43-     | 70- 5    | 173-    | 62- 6  | 252-     | 54- 4  | 640-     | 45- 51  | -        | 37- 91   | -        | 29- 574  | -      | 23-714  | 790    |
| 50                  | 44-117/4 | 54- J   | 43- 91/  | 58- 2   | 43- 61/4 | 18- 1   | 41-41)   | 63-3    | 39- 51 | 71-4     | 25- 31 | 86-      | 21-41   | 125-     | 27- 61%  | 284      | 22-101/2 |        | 19- 25- | -      |
| 30                  | 28- 11/4 | 32- 11/ | 27- 81/4 | 32- 9   | 27- 41/4 | 22-11   | 26- 81/4 | 24- 3   | 25- 6  | 34- 51/  | 24- 1  | 29-11    | 22- 2   | 46- 61/2 | 20- 21/4 | 58- 9    | 12- 71/4 | 104-   | 15-4%   | 44- 15 |
| 20                  | 19- 2    | 20-11   | 18-11%   | 21-2    | 18-10%   | 21- 2%  | 18: 5%   | 21- 91  | 17-11  | 22- 716  | 17- 21 | 22-11    | 16- 2%  | 26- 17   | 15-2     | 29-6     | 12- 8    | 37-71, | 12-4%   | 55- 91 |
| 15                  | 14-61/4  | 15- 6   | 14-47    | 15 34/  | 14-4%    | 15- 21/ | 14- 116  | 15-1114 | 13- 9% | 16- 5    | 12-45  | W 17- 80 | 12- 910 | 18-15    | 12-11/4  | 19- 81/4 | 11- 2    | 22-11% | 10-3%   | 28- 55 |
| 12                  | 11- 81%  | 12- 23  | 11- 476  | 12- 41  | 11- 7%   | 12- 31/ | 11- 51)  | 12-774  | 11-21  | 12-101/  | 10-111 | 12-3%    | 10- 65  | 13-101   | 10- 17/4 | 14- 91 4 | 9- 514   | 14- 4  | # 10    | 19- 11 |
| 10                  | 9- 91/2  | 10- 21/ | 9-876    | 10- 31/ | 9- 81/4  | 10- 31  | 9- 71    | 10-47   | 9- 3%  | 10- 71/4 | 7-4    | 10-10%   | 9-      | 11-31/4  | 2-1%     | 11-97    | 8- 25-   | 12-101 | 7-817   | 14 1   |
|                     | 7-101/4  | 8- 15/  | 7-10     | 8-2     | 7-10     | 8-2%    | 7- 91/4  | 8-2     | 7- 1   | 8-4%     | 7- 61  | 8-472    | 7-45    | 2.1%     | 7-11/4   | 2-15.    | 6- 91    | 9- 81% | 4.44    | 10- 51 |
| 7                   | 6-107/4  | 7-1%    | g-101/i  | 7- 17/2 | 6-101/   | 7- 115  | 4- 91%   | 7-2%    | 4-1    | 7- 31    | 4-71   | 2-410    | 6-61)   | 7-67     | 4.4%     | 7- 90%   | 6-1      | E- 3   | 5-10%   | 8- 91  |
|                     | 5-111/4  | 4- 7    | 5-10/4   | 6- 1%   | 5-11     | 4- 150  | 5-101/   | 4-10    | 5-95   | 6-25     | 2. 9   | 6- 31    | 5-7%    | 4-4%     | 3-47     | 4- 47/4  | 5-4      | 6-1011 | 3-274   | 7-21   |
| 2                   | 4:17%    | 5- 1    | 4-1115   | 5- 30   | 4-11%    | \$- 17  | 4-11     | 5-11/4  | 4-101/ | 5- 110   | 4-10   | 2-21/4   | 4-91    | 5-31/4   | 4- 81 4  | 5- 415   | 4-615    | 5-45   | 100     |        |
| 4                   | 3-111/4  | 4- 1/4  | 2-111/2  | 4 1/1   | 2-11%    | 4- 1/   | 2-1179   | 4- 14   | 2-11%  | 4-1      | 3-101  | 4- 170   | 3-10    | 4-2      | 3- 91    | 4- 374   | 2- 81    | 4.4%   | 3-71    | 4- 52  |
| 5.5                 | 3- 37,   | 2-61/4  | 3- 5%    | 2- 41/4 | 2-5%     | 3- 615  | 3- 51/2  | 2- 61/3 | 3-5%   | 3-64     | 2- 5   | 3-7      | 3- 411  | 3- 74    | 2-416    | 2- 8     | 2- 214   | 2. 9   | 3 214   | 3 07   |

85 mm

CANON LENSES 85 mm

and f:1.5

#### DEPTH OF FIELD IN METERS

| Nichmen<br>Navones |         |        |         |        |         |        |        | Circle | of Ca  | nfusion | 0.03   | 5       |        |        |        |        |        |        |       |         |
|--------------------|---------|--------|---------|--------|---------|--------|--------|--------|--------|---------|--------|---------|--------|--------|--------|--------|--------|--------|-------|---------|
| 64                 | 177     | 1.5    | 100     | 1.9    | 1.1     | 2      | 1/2    | 7.8    | t i    |         | Li     | 5.6     |        | 8      | .0     | (1)    | 10     | 16     | 100   | 22      |
| -                  | *       |        |         | *      |         |        |        |        | m.     | m       | m      |         | -      | w      | - 11   | H      | - 16   |        | m     | **      |
|                    | 134.000 | -      | 100.000 | -      | 100.000 |        | 72.000 | -      | 30.400 |         | 36.000 | -       | 25.200 | 2      | 18.300 | -      | 17,600 | -      | 9.323 | 84      |
| 30                 | 74,600  | 3#.100 | 23,400  | 41.700 | 23.700  | 47.600 | 21.300 | 11.200 | 18,900 | 73.100  | 14.400 | 175,000 | 13.500 | -      | 11.300 | -      | 8.900  | -      | 2.166 | 0.0     |
| 25                 | 13,160  | 18.850 | 13,150  | 17.450 | 13,100  | 17,600 | 12.450 | 18.900 | 11.400 | 21.250  | 10,450 | 25.500  | * e50  | 38.450 | 8.300  | 78,610 | 4.700  |        | 5.825 | 100     |
| 14                 | 9.226   | 10.719 | 9,160   | 11,820 | 9.120   | 11.000 | 8.000  | 11.880 | 9.395  | 12.410  | 7.870  | 13.749  | 2,710  | 16.785 | 4.538  | 21.159 | 5,842  | 45.620 | K-903 | 133,291 |
| 2                  | 8.660   | 7.376  | A-160   | 7.480  | 8.510   | 7.510  | 6,400  | 7,720  | 6.170  | 1.090   | 5,810  | 8.822   | 2,520  | 9.190  | 5.119  | 11.140 | 4,360  | 18-375 | 2,762 | 27.04   |
| 1                  | 4.630   | 5.180  | 4760    | 5.246  | 4,220   | 5.230  | 4.610  | 3 340  | 4,370  | 5.570   | 4.410  | 3.776   | 4.200  | 4.180  | 3,970  | 6.750  | 3,430  | 3.010  | 3.316 | 10.43   |
| 4                  | 3.890   | 4.120  | 3.840   | 4,150  | 3.610   | 4.140  | 3.800  | 4226   | 3720   | ×320    | 2,620  | 4.470   | 2.460  | 4,710  | 3.325  | 3.219  | 3.888  | 3,726  | 2.848 | 8,290   |
| 1                  | 2.510   | 1.045  | 2.923   | 2.019  | 2,990   | 2.015  | 2.810  | 3.126  | 2.545  | 3,179   | 1,741  | 3.110   | 3.788  | 2.375  | 2.605  | 2.549  | 2,460  | 3.668  | 2.324 | 4.27    |
| 2.5                | 2.460   | 7.543  | 2.40    | 2.555  | 2.443   | 2.562  | 2.422  | 2.300  | 2.190  | 2.802   | 2310   | 2.870   | 2.210  | 2750   | 2.219  | 2,665  | 2:120  | 3.000  | 2.001 | 2.46    |
| T.                 | 3.875   | 2,025  | 1,765   | 2 635  | 1.915   | 240    | 1,950  | 2:050  | 1.420  | 2.675   | 1.923  | 2.185   | 1.676  | 2.115  | 1.825  | 2255   | 1.733  | 2.338  | 1.689 | 2.42    |
| 121                | 1.720   | 1276   | 1721    | 1.775  | 1725    | 1,771  | 1.713  | 1.790  | 1,700  | 1.800   | LASE   | 1,826   | 1,650  | 1.861  | 7.83.5 | 3.910  | 3.500  | 1,993  | 1.316 | 2,68    |
| 1.5                | 1.486   | 1.518  | 1.40    | 3.318  | 140     | 3.319  | 15474  | 1.322  | 1.462  | 1.529   | 1.442  | 1.559   | 1.427  | 1.045  | 1.402  | 1.614  | 1,283  | 1,671  | 1,310 | 3.73    |
| 1.23               | 1.249   | 1.240  | 1339    | 3.242  | 1.237   | 1.013  | 1.227  | 1.286  | 1.225  | 3.374   | 1218   | 1.287   | 1.201  | 1.004  | 1.189  | 1,355  | 1,134  | 1.345  | 1.135 | 1.79    |
| 1                  | 2.774   | 1.004  | 0.773   | 1.007  | 0.093   | 1.006  | 2.147  | 1,611  | 0.795  | 7.016   | 6.579  | 1 421   | 0.170  | 1.012  | 0.719  | 1.585  | 0.942  | 1.847  | 0.931 | 1,640   |

85 mm

| Distance |          |          |          |          |          | Circle   | of Co    | nfusion= | 0.035    |          |          |          |          |         |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| focused  | f:       | 3.5      | 1        | 4        | f :      | 5.6      | 1.       | 8        | f :      | 11       | fi       | 16       | 1        | 22      |
| 6        | ft-in    | ft-la    | ft-in    | ft-in    | ft-in    | ft-in    | ft-in   |
| -        | 483-     | -        | 423-     | -        | 302-     |          | 212-     | -        | 154-     | 100      | 106-     | -        | 76- 9    | -       |
| 200      | 141-     | 340-     | 136-     | 378-     | 121-     | 581-     | 103-     | 3521-    | 87- 4    | -        | 69- 7    | 46       | 56-      | -       |
| 100      | 83- 1    | 125-     | 81- 1    | 101-     | 75- 5    | 149-     | 68- 3    | 188-     | 61-      | 281-     | 51-10    | 1629-    | 43-111/2 | -       |
| 70       | 61- 4    | 81- 7    | 60- 3    | 83- 7    | 27- 1    | 90-8     | 52-10    | 104-     | 48- 5    | 127-     | 42- 6    | 202-     | 27- 1    | 692- 51 |
| 50       | 45- 51/4 | 55- 71/4 | 44-10    | 56- 6    | 43- 1    | 59- 8    | 40- 8    | 65=      | 38-      | 73- 3    | 34- 21/2 | 93-      | 30- 01/2 | 127- 71 |
| 30       | 28- 4    | 31-103/4 | 28- 11/4 | 32- 21/  | 27- 41/4 | 33- 13/4 | 26- 51/4 | 34- 81/1 | 25- 32/4 | 36-103/4 | 23- 71/1 | 41+ 21/2 | 21-11    | 47-111  |
| 20       | 19- 31/4 | 20- 95/1 | 19- 17/  | 20-111/2 | 18-101/2 | 21- 33/4 | 18- 45/6 | 21-11%   | 17-101/4 | 22- 91/4 | 17~ 1/4  | 24- 31/2 | 16- 15/6 | 26- 51  |
| 15       | 14- 71/4 | 15- 51/  | 14- 63   | 15- 6    | 14- 41/4 | 15- 81/3 | 14- 11/4 | 16- 3%   | 13- 97/4 | 16- 51/2 | 13- 31/1 | 17- 21/4 | 12- 91/4 | 18- 23  |
| 12       | 11- 87/4 | 12- 31/4 | 11- 81/  | 12- 31   | 11-71/   | 12- 51/4 | 11- 51/1 | 12- 75%  | 11- 22/4 | 12-101/4 | 10-107/4 | 13- 41/4 | 10- 63/4 | 13-111  |
| 10       | 9- 97    | 10- 21/4 | 9- 95    | 10- 21/  | 9- 81/   | 10- 31/3 | 9- 73/4  | 10- 51/4 | 9- 51    | 10-71/4  | 9-3      | 10-105/a | 9-       | 11- 31  |
| 8        | 7-102/4  | 8- 11/1  | 7-101/   | 8- 17/2  | 7-10     | 8- 21/2  | 7- 91/4  | 8- 31/4  | 7- 81/4  | 8- 12),  | 7- 61/4  | 8- 63/4  | 7- 41/2  | 8- 9    |
| 7        | 6-11     | 7- 1     | 6-107/   | 7- 11/   | 6-101/2  | 7- 11/4  | 6- 97/1  | 7- 21/4  | 6- 9     | 3- 31/4  | 6- 72/4  | 7-4%     | 6-61     | 7- 61   |
| 6        | 5-113/4  | 6- 1     | 5-111/   | 6- 7     | 5-107    | 6- 11    | 5-101    | 6- 11/4  | 5- 97    | 4- 21/4  | 5- 9     | 6- 31/4  | 5- 4     | 6- 41   |
| 16       | 4-111/-  | E. 15    | 4.100    | A        | 4.777    | 2. 31    | 4.99     | 4- 1     | 4.165    | F 111    |          | F. OIL   | 4 011    | F 42    |

100 mm

#### DEPTH OF FIELD IN FEET



TWIN-TURRET ZOOMFINDER II

#### DEPTH OF FIELD IN METERS

| Distance<br>focused |        |         |        |         | C      | ircle of | Confi  | usion  | 0.035  | 5      |        |        |        |        |
|---------------------|--------|---------|--------|---------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| ent                 | 1:     | 3.5     | 11     | . 4     | f:     | 5.6      | 1      | 1 8    | 11     | . 11   | f:     | 16     | 11     | 22     |
|                     | -      | m       | m      | m       | п      | m        | est    | m      | m      | m      | m      | m      | m      | .m.:   |
|                     | 81,600 |         | 71,400 | -       | 51.000 | -        | 35.700 | -      | 26,000 | -      | 17,900 | -      | 13.000 | -      |
| 50                  | 31,100 | 128.000 | 29.500 | 164.000 | 25.400 | 2084.000 | 20,900 | -      | 17.200 | -      | 13.300 | -      | 10.400 | -      |
| 20                  | 16.100 | 26.350  | 15.700 | 27.650  | 14.450 | 32.600   | 12.900 | 44.750 | 11.400 | 83,800 | 9.550  | -      | 8.000  | 346    |
| 10                  | 8.940  | 11,350  | 8.810  | 11.570  | 8.410  | 12.350   | 7.870  | 13.740 | 7.290  | 16,000 | 6.490  | 22,030 | 5.740  | 40.410 |
| 7                   | 6.470  | 7.630   | 6.400  | 7.730   | 6,190  | 8.060    | 5.900  | 8,620  | 5,570  | 9.450  | 5.100  | 11.240 | 4,630  | 14.580 |
| 5                   | 4.730  | 5.310   | 4.690  | 5.350   | 4.580  | 5.510    | 4,420  | 5.760  | 4.240  | 6,110  | 3.960  | 6.800  | 3.680  | 7.670  |
| 4                   | 3,830  | 4,190   | 3.800  | 4.220   | 3.730  | 4,310    | 3,630  | 4.460  | 3,500  | 4.670  | 3.320  | 5.050  | 3,120  | -5,610 |
| 3                   | 2.900  | 3,105   | 2.890  | 2.120   | 2.850  | 3,170    | 2.790  | 3.745  | 2.720  | 3.350  | 2.610  | 3.535  | 2.485  | 3.795  |
| 2.5                 | 2,435  | 2.570   | 2.425  | 2.580   | 2.395  | 2.610    | 2.355  | 2.665  | 2.305  | 2,730  | 2.225  | 2.855  | 2.140  | 3.011  |
| 2                   | 1,960  | 2.045   | 1.955  | 2.050   | 1,935  | 2.070    | 1,910  | 2.100  | 1,880  | 2.140  | 1.825  | 2,210  | 1.770  | 2.305  |
| 1.75                | 1.720  | 1,760   | 1.715  | 1.785   | 1.700  | 1.800    | 1,680  | 1.025  | 1.660  | 1.855  | 1,620  | 1.905  | 1.575  | 1.970  |
| 1,5                 | 1,478  | 1,552   | 1.475  | 1.526   | 1.466  | 1.536    | 1,451  | 1.552  | 1.434  | 1,573  | 1,408  | 1.608  | 1,374  | 1.65   |
| 1.25                | 1.236  | 1.265   | 1.234  | 1.267   | 1.227  | 1.274    | 1.218  | 1,284  | 1.208  | 1,298  | 1,187  | 1.320  | 1.186  | 1.34   |
| 1                   | 0.992  | 1.007   | 0.990  | -1.010  | 0.967  | 1.014    | 0.981  | 1.020  | 0.974  | 1.028  | 0.963  | 1.041  | 0.949  | 1.05   |

100 mm

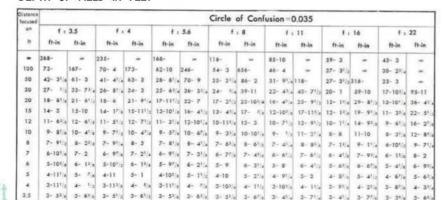


UNIVERSAL

VIEWFINDER V

CANON LENS 100 mm

f35





LENS HOOD

WITH

CLAMP ON TYPE

ADAPTER RING

135 mm

CANON LENS 135 mm

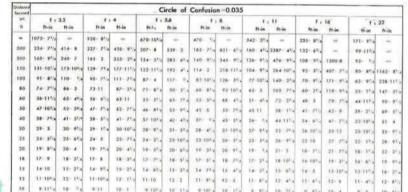
#### DEPTH OF FIELD IN METERS



ZOOMFINDER L FOR TELEPHOTO LENS

| Distance<br>focused<br>on<br>m | Circle of Confusion=0.035 |         |         |         |         |         |        |         |        |        |        |         |        |        |
|--------------------------------|---------------------------|---------|---------|---------|---------|---------|--------|---------|--------|--------|--------|---------|--------|--------|
|                                | 1 : 3.5                   |         | 1:4     |         | 1 : 5.6 |         | f : 8  |         | 1 + 11 |        | f : 16 |         | f : 22 |        |
|                                | m                         | m       | m       | m       | m       | m       | m      | m       | m      | 119    | m      | m       | m      | m      |
|                                | 147.000                   | 100     | 128.000 | -       | 91.900  | -       | 64.300 | -       | 46.800 | -      | 32.200 | -       | 23.400 | -      |
| 60                             | 42.700                    | 100.000 | 41.000  | 111.000 | 36.400  | 171.000 | 31,200 | 832.000 | 26,400 | -      | 21.100 | -       | 17,000 | -      |
| 30                             | 25,000                    | 37.600  | 24.400  | 39,000  | 22,700  | 44,300  | 20.600 | 55.600  | 18,400 | 81.900 | 15,700 | 190,000 | 13.300 | *      |
| 20                             | 17.650                    | 23.050  | 17,350  | 23.600  | 16.500  | 25.400  | 15.350 | 28.750  | 14.100 | 34.450 | 12.450 | 51,400  | 10.900 | 126.00 |
| 15                             | 13:650                    | 16.650  | 13,500  | 16.900  | 12.950  | 17.850  | 12,250 | 19,315  | 11.450 | 21.800 | 10.350 | 27.500  | 9,250  | 40,15  |
| 10                             | 9,390                     | 10,700  | 9.310   | 10.800  | 9.060   | 11.160  | 8.710  | 11.750  | 8.310  | 12.580 | 7,720  | 14.260  | 7.110  | 16.98  |
| 7                              | 6.700                     | 7,330   | 6.660   | 7.380   | 6.530   | 7,540   | 6.350  | 7.800   | 6.140  | 8.150  | 5.820  | 8.800   | 5.480  | 9.75   |
| 5                              | 4.850                     | 5,160   | 4,830   | 5.180   | 4,760   | 5.260   | 4.670  | 5,380   | 4.560  | 5.540  | 4,380  | 5.830   | 4,190  | 6.22   |
| 4                              | 3,910                     | 4,100   | 3.590   | 4,110   | 3.850   | 4,160   | 3,790  | 4.230   | 3.720  | 4.330  | 3.600  | 4.500   | 3.470  | 4,72   |
| 3                              | 2.950                     | 3.055   | 2.940   | 3.060   | 2.920   | 3.085   | 2,885  | 3.125   | 2.845  | 3.175  | 2.780  | 3,260   | 2,705  | 3.37   |
| 2.5                            | 2,465                     | 2,535   | 2.460   | 2.540   | 2.445   | 2.555   | 2.425  | 2.585   | 2.395  | 2,615  | 2.350  | 2.670   | 2.300  | 2.74   |
| 2                              | 1.980                     | 1775000 | 9.000   | 2.025   | 1.965   | 2.035   | 1.955  | 2.050   | 1,935  | 2.070  | 1,910  | 2.100   | 1.875  | 2.14   |
| 1.75                           | 1.735                     | - 2000  | 1000    | 1.770   | 1.775   | 1.725   | 1.715  | 1.785   | 1.700  | 1.800  | 1,680  | 1.825   | 1.660  | 1.65   |
| 1.5                            | 1.480                     | 2533    | 1.488   | 1.517   | 1.483   | 1.518   | 1.476  | 1.525   | 1.467  | 1,535  | 1,452  | 1.551   | 1.435  | 1.57   |

135 mm





UNIVERSAL FRAME FINDER

#### DEPTH OF FIELD IN METERS

| Distance<br>focused<br>on<br>m | Circle of Confusion = 0.035 |              |                   |                |              |          |                |          |             |        |        |         |          |          |
|--------------------------------|-----------------------------|--------------|-------------------|----------------|--------------|----------|----------------|----------|-------------|--------|--------|---------|----------|----------|
|                                | 1 : 3.5                     |              |                   | 4 1 : 5.6      |              | 5.6      | 118            |          | f x 11      |        | f + 16 |         | . 1 : 22 |          |
|                                | m                           | m            | m                 | m              | m            | m        | m              | m.       | - m         | m      | m      | m       | - 10     | m        |
| -                              | 326.935                     | 60           | 286.119           | -              | 204.456      | +0       | 143.262        | 99       | 104.301     | .00    | 71.833 | 00      | 52.352   | 66       |
| 100                            | F-1000-710                  | 201.916      | F2000011111       | 221.399        | 77.774       | 320.405  | 68.940         | 976.014  | 57.062      | 44     | 45.808 | 60      | 37.068   | :09      |
| 50                             | 43.439                      | TOTAL        | 20.690            | LIM CONTRACTOR | 40.286       | 65.872   | 37.204         | 76.307   | 23.558      | 95,192 | 29.666 | 162.349 | 25.770   | 1081.486 |
| 30                             | 27.552                      |              | 27.233            | 33.436         | 26.262       | 35.038   | 24.931         | 37.754   | 23:447      | 41.814 | 21.337 | 50.975  | 19,265   | 69.253   |
| 20                             | 18.886                      |              |                   | 21.437         | 18.280       | 22.075   | 17.633         | 23.108   | 16.888      | 24.546 | 15.779 | 27.397  | 14.631   | 31.853   |
| 15                             | 14.376                      | V-1000000000 | 14.291            | 15,786         | 14.026       | 16.125   | 13.648         | 18.861   | 13.203      | 17.385 | 12.525 | 18:747  | 11.800   | 20.701   |
| 12                             | 11.601                      | 12:425       | 11.547            | 12.489         | 11.376       | 12.697   | 11.129         | 13.022   | 10.835      | 13.454 | 10,380 | 14.244  | 9.884    | 15.321   |
| 10                             | 9.775                       | 100,000,000  | 9.687             | 10.332         | ( CONTRACTOR | 3100.000 | 9.395          | 10.689   | 9,188       | 10.974 | 8.863  | 11.486  | 8.504    | 12.170   |
| 8                              | 7.827                       | 8.180        | 0.0000            | 6.207          | 7.724        | 8.293    | 597,1000       | 8.426    | 2.483       | 8.598  | 7,271  | 8,907   | 7.032    | 9.29     |
| ,                              | 6.869                       | 1300000      | 2000000           | 0.0000         | 100          | 7.219    | 076000         | 7.318    | 247,367,00  | 7.445  | 6.443  | 7.669   | 6.238    | 7.95     |
| 5.0                            | 5.906                       | 20,000       | 5.893             | 20000          | 23333        | 6.157    | 8 State 105 PM | 6.227    | 10,107,500  | 6.317  | 5.594  | 6.474   | 5.457    | 6.67     |
|                                | 4.936                       | 1397661      | T100000           | 5.075          | 2013a10.     | 5.105    | 237000         | 5,152    | 135 Table   | 5.212  | 4.723  | 5.314   | 4.628    | 5.44     |
| 5                              | 3.961                       | 1/0/2002     | 11/15/55/5        | 1933.50        |              | 4.064    |                | (50000   | 1000000     | 4:128  | 3.829  | 4.189   | 3,768    | 4.76     |
| 3.5                            | 3.471                       | 1217000      | Constant Constant | 3,50,100       | 10000        | 13330    |                | 100000   | 10.000000   | 3.594  | 3.372  | 3.639   | 3.327    | 3.69     |
| 3.3                            | 2.980                       | 000,000      | 1 223             | 99000          | 302013       | 100000   | 030233         | 10006070 | #1 23000000 | 3.066  | 2.910  | 3.097   | 2.878    | 3.13     |

200 mm

f:3.5

PLASTIC LENS CASE