

Exposure Value Chart

| EV | TYPE OF LIGHTING SITUATION |
|-----------|--|
| -6 | Night, away from city lights, subject under starlight only. |
| -5 | Night, away from city lights, subject under crescent moon. |
| -4 | Night, away from city lights, subject under half moon. Meteors (during showers, with time exposure). |
| -3 | Night, away from city lights, subject under full moon. |
| -2 | Night, away from city lights, snowscape under full moon. |
| -1 | Subjects lit by dim ambient artificial light. |
| 0 | Subjects lit by dim ambient artificial light. |
| 1 | Distant view of lighted skyline. |
| 2 | Lightning (with time exposure). Total eclipse of moon. |
| 3 | Fireworks (with time exposure). |
| 4 | Candle lit close-ups. Christmas lights, floodlit buildings, fountains, and monuments. Subjects under bright street lamps. |
| 5 | Night home interiors, average light. School or church auditoriums. Subjects lit by campfires or bonfires. |
| 6 | Brightly lit home interiors at night. Fairs, amusement parks. |
| 7 | Bottom of rainforest canopy. Brightly lighted nighttime streets. Indoor sports. Stage shows, circuses. |
| 8 | Las Vegas or Times Square at night. Store windows. Campfires, bonfires, burning buildings. Ice shows, football, baseball etc. at night. Interiors with bright florescent lights. |
| 9 | Landscapes, city skylines 10 minutes after sunset. Neon lights, spotlighted subjects. |
| 10 | Landscapes and skylines immediately after sunset. Crescent moon (long lens). |
| 11 | Sunsets. Subjects in deep shade. |
| 12 | Half moon (long lens). Subject in open shade or heavy overcast. |
| 13 | Gibbous moon (long lens). Subjects in cloudy-bright light (no shadows). |
| 14 | Full moon (long lens). Subjects in weak, hazy sun. |
| 15 | Subjects in bright or hazy sun (Sunny f/16 rule). |
| 16 | Subjects in bright daylight on sand or snow. |
| 17 | Rarely encountered in nature. Some man made lighting. |
| 18 | Rarely encountered in nature. Some man made lighting. |
| 19 | Rarely encountered in nature. Some man made lighting. |
| 20 | Rarely encountered in nature. Some man made lighting. |
| 21 | Rarely encountered in nature. Some man made lighting. |
| 22 | Extremely bright. Rarely encountered in nature. |
| 23 | Extremely bright. Rarely encountered in nature. |

Exposure Factor Relationship Chart B

| FILM SPEED (ISO/ASA NUMBER) | | | | | | | | APERTURE OF LENS (f/STOP) | | | | | | | | | | |
|--|-----------|------------|------------|------------|------------|-------------|-------------|--------------------------------------|--------------|--------------|--------------|-------------|-------------|-------------|------------|------------|------------|----------|
| ISO 25 | ISO 50 | ISO 100 | ISO 200 | ISO 400 | ISO 800 | ISO 1600 | ISO 3200 | f/1.4 | f/2.0 | f/2.8 | f/4 | f/5.6 | f/8 | f/11 | f/16 | f/22 | f/32 | |
| 1 | 0 | -1 | -2 | -3 | -4 | -5 | -6 | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | 2 min | 4 min | 8 min | 16 min | 32 min | |
| 2 | 1 | 0 | -1 | -2 | -3 | -4 | -5 | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | 2 min | 4 min | 8 min | 16 min | |
| 3 | 2 | 1 | 0 | -1 | -2 | -3 | -4 | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | 2 min | 4 min | 8 min | |
| 4 | 3 | 2 | 1 | 0 | -1 | -2 | -3 | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | 2 min | 4 min | |
| 5 | 4 | 3 | 2 | 1 | 0 | -1 | -2 | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | 2 min | |
| E | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | 1 min | S |
| V | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | 30 sec | H |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | 15 sec | U |
| N | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | 8 sec | T |
| U | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | 4 sec | T |
| M | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | 2 sec | E |
| B | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec | R |
| E | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | |
| R | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | S |
| S | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | P |
| 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | E |
| 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | E |
| 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | D |
| 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 1/60000 sec | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | S |
| 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 1/125000 sec | 1/60000 sec | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | 1/250 sec | |
| 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 1/250000 sec | 1/125000 sec | 1/60000 sec | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | 1/500 sec | |
| 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 1/500000 sec | 1/250000 sec | 1/125000 sec | 1/60000 sec | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | 1/1000 sec | |
| 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 1/1000000 sec | 1/500000 sec | 1/250000 sec | 1/125000 sec | 1/60000 sec | 1/30000 sec | 1/15000 sec | 1/8000 sec | 1/4000 sec | 1/2000 sec | |