# Available Light Photography without an exposure meter

Now that we have digital cameras, we have the ability to alter the effective speed of the recording medium – the chip on which the light falls – and thereby be more creative than the photographer who uses film, which has to be exposed according to the film speed that is printed on the box.

The tables on the next sheet are used as follows.

1. Consider the subject and the light falling on it or emitted by it
2. Start with the **upper table** – a list of subjects, brightest at the top, and dimmest at the bottom
3. Look at each line of the subjects, and choose the nearest description to the object or view that you wish to photograph
4. Look along the line to the number on the right. This is the light value (LV)
5. Light value is an absolute value for brightness – nothing to do with the camera at this stage
6. Now we move on to the **lower table** (the colourful one)
7. First, find the LV that you have just ascertained, down the left hand side
8. Now go horizontally along that row until the column for the ISO speed of the "film" or sensor
9. There will be an EV number in that box – this is the exposure value that you will set on the camera
10. However, by varying the shutter speed and aperture you can obtain different effects and still keep the same EV
11. The various combinations that give the required EV are to be found on the table, wherever the same EV number is found
12. To make it easier to see, the EV numbers have been coloured
13. For example, the faster the speed you wish to use, the larger the aperture you must set (f/1.4 is larger than f/2 by one stop for example)
14. Alternatively, a small aperture will require a slower shutter speed
15. If in doubt, bracket your exposures

Sun high in the sky, light subject…………………………………………… 20
Sun high in the sky, normal subject………………………………………… 19
Sun high in the sky, side-lit subject………………………………………… 18
Sun high in the sky, back-lit subject……………………………………….. 17
Sun high in the sky, lightly shaded subject………………………………… 16
Sun high in the sky, heavily shaded subject………………………………. 15
Sun low in the sky, subjects as above……………………………………… reduce LV by 1
Hazy sun, subjects as above…………………………………………………. reduce LV by 1
Cloudy bright, subjects as above……………………………………………. reduce LV by 2
Cloudy dull, subjects as above………………………………………………. reduce LV by 3
Full moon, showing detail……………………………………………………. 15
Skyline, just after sunset……………………………………………………. 15
Skyline,10 mins. after sunset………………………………………………. 14
Circus ring; Neon signs………………………………………………………. 14
Well-lit shop windows; Bonfire………………………………………………. 13
Interiors with fluorescent lighting…………………………………………… 13
Well-lit city streets; Edinburgh Tattoo……………………………………… 12
City streets, darker lit; Fairground lights…………………………………… 11
Home interior; Floodlit buildings……………………………………………. 9 to 11
Art galleries; Museums; Church interiors…………………………………. 10
Faces in firelight………………………………………………………………. 10
Street-lit subjects; Christmas lights………………………………………… 9
Face lit by single candle……………………………………………………… 8
Skyline + lit-up buildings, 1 hr. after sunset……………………………… 6
Moon-lit snowscape…………………………………………………………… -1 to 3 (depends on the moon)
Moon-lit landscape……………………………………………………………. -2 to 2 (depends on the moon)
Aurorae…………………………………………………………………………. -2 to 4 (bracketing required)

| Brightness LV | ISO 6400 | ISO 3200 | ISO 1600 | ISO 800 | ISO 400 | ISO 200 | ISO 100 | ISO 50 | ISO 25 | Speed Sec |
|---|---|---|---|---|---|---|---|---|---|---|
| ↓ | | | | | | | | | | ↓ |
| 20 | EV 21 | EV 20 | EV 19 | EV 18 | EV 17 | EV 16 | EV 15 | EV 14 | EV 13 | 1/4000 |
| 19 | EV 20 | EV 19 | EV 18 | EV 17 | EV 16 | EV 15 | EV 14 | EV 13 | EV 12 | 1/2000 |
| 18 | EV 19 | EV 18 | EV 17 | EV 16 | EV 15 | EV 14 | EV 13 | EV 12 | EV 11 | 1/1000 |
| 17 | EV 18 | EV 17 | EV 16 | EV 15 | EV 14 | EV 13 | EV 12 | EV 11 | EV 10 | 1/500 |
| 16 | EV 17 | EV 16 | EV 15 | EV 14 | EV 13 | EV 12 | EV 11 | EV 10 | EV 9 | 1/250 |
| 15 | EV 16 | EV 15 | EV 14 | EV 13 | EV 12 | EV 11 | EV 10 | EV 9 | EV 8 | 1/125 |
| 14 | EV 15 | EV 14 | EV 13 | EV 12 | EV 11 | EV 10 | EV 9 | EV 8 | EV 7 | 1/60 |
| 13 | EV 14 | EV 13 | EV 12 | EV 11 | EV 10 | EV 9 | EV 8 | EV 7 | EV 6 | 1/30 |
| 12 | EV 13 | EV 12 | EV 11 | EV 10 | EV 9 | EV 8 | EV 7 | EV 6 | EV 5 | 1/15 |
| 11 | EV 12 | EV 11 | EV 10 | EV 9 | EV 8 | EV 7 | EV 6 | EV 5 | EV 4 | 1/8 |
| 10 | EV 11 | EV 10 | EV 9 | EV 8 | EV 7 | EV 6 | EV 5 | EV 4 | EV 3 | 1/4 |
| 9 | EV 10 | EV 9 | EV 8 | EV 7 | EV 6 | EV 5 | EV 4 | EV 3 | EV 2 | 1/2 |
| 8 | EV 9 | EV 8 | EV 7 | EV 6 | EV 5 | EV 4 | EV 3 | EV 2 | EV 1 | 1 |
| 7 | EV 8 | EV 7 | EV 6 | EV 5 | EV 4 | EV 3 | EV 2 | EV 1 | EV 0 | 2 |
| 6 | EV 7 | EV 6 | EV 5 | EV 4 | EV 3 | EV 2 | EV 1 | EV 0 | EV -1 | 4 |
| 5 | EV 6 | EV 5 | EV 4 | EV 3 | EV 2 | EV 1 | EV 0 | EV -1 | EV -2 | 8 |
| 4 | EV 5 | EV 4 | EV 3 | EV 2 | EV 1 | EV 0 | EV -1 | EV -2 | EV -3 | 15 |
| 3 | EV 4 | EV 3 | EV 2 | EV 1 | EV 0 | EV -1 | EV -2 | EV -3 | EV -4 | 30 |
| 2 | EV 3 | EV 2 | EV 1 | EV 0 | EV -1 | EV -2 | EV -3 | EV -4 | EV -5 | 1 min |
| 1 | EV 2 | EV 1 | EV 0 | EV -1 | EV -2 | EV -3 | EV -4 | EV -5 | EV -6 | 2 min |
| 0 | EV 1 | EV 0 | EV -1 | EV -2 | EV -3 | EV -4 | EV -5 | EV -6 | EV -7 | 4 min |
| -1 | EV 0 | EV -1 | EV -2 | EV -3 | EV -4 | EV -5 | EV -6 | EV -7 | EV -8 | 8 min |
| -2 | EV -1 | EV -2 | EV -3 | EV -4 | EV -5 | EV -6 | EV -7 | EV -8 | EV -9 | 16 min |
| | | | | | | | | | | |
| Aperture→ | f/22 | f/16 | f/11 | f/8 | f/5.6 | f/4 | f/2.8 | f/2 | f/1.4 | ←Aperture |