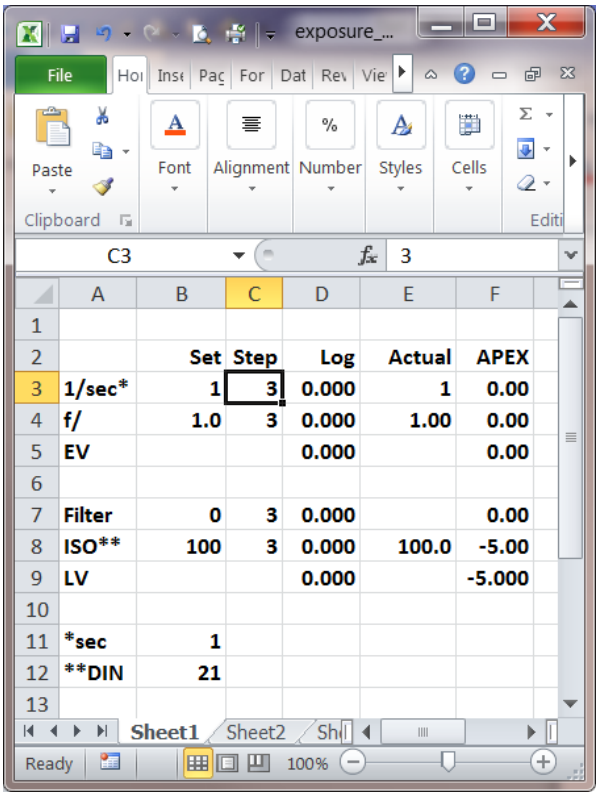
Light Value (LV) 15

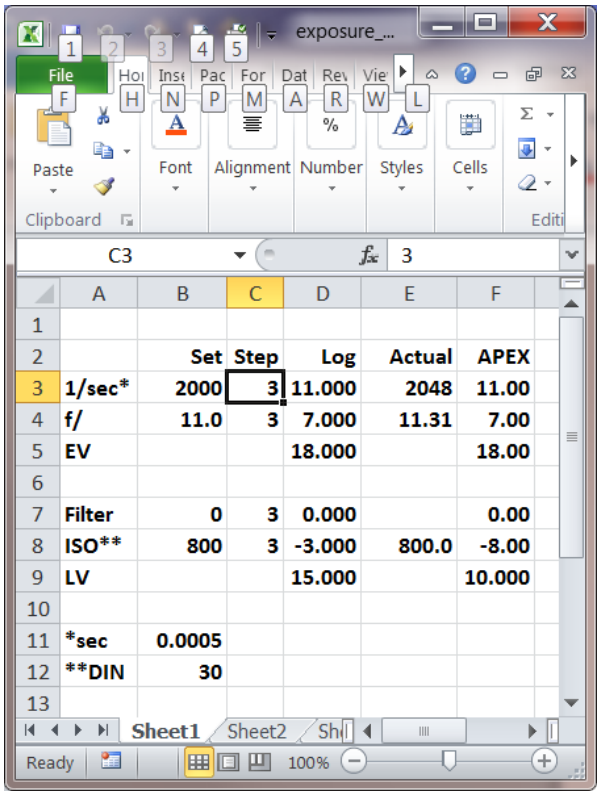
Exposure Value (EV) is a combination of aperture and shutter speed. Because it is independent of ISO some film cameras have EV tables (Rolleiflex) or settings (Hasselblad) built in.

Include ISO and you get Light Value (LV). Some light meters display LV directly and provide an ISO dial to convert LV to EV.

The values increase by one with each doubling of the shutter speed, each full stop in aperture and each doubling in ISO:



	A	B	C	D	E	F
1						
2		Set	Step	Log	Actual	APEX
3	1/sec*	1	3	0.000	1	0.00
4	f/	1.0	3	0.000	1.00	0.00
5	EV			0.000		0.00
6						
7	Filter	0	3	0.000		0.00
8	ISO**	100	3	0.000	100.0	-5.00
9	LV			0.000		-5.000
10						
11	*sec	1				
12	**DIN	21				
13						



	A	B	C	D	E	F
1						
2		Set	Step	Log	Actual	APEX
3	1/sec*	2000	3	11.000	2048	11.00
4	f/	11.0	3	7.000	11.31	7.00
5	EV			18.000		18.00
6						
7	Filter	0	3	0.000		0.00
8	ISO**	800	3	-3.000	800.0	-8.00
9	LV			15.000		10.000
10						
11	*sec	0.0005				
12	**DIN	30				
13						

The whitest bird feathers, sea foam, cumulus clouds, white cloth or paint, white gelcoat – all of these are in danger of blowing out the highlights in broad daylight. Highlights get blown when the raw value exceeds the raw limit which is close to 16383 in a 14-bit raw file. When that happens, the camera's JPEG is also at its 8-bit limit of 255.

The one irreparable error you can make when exposing a scene is to blow the highlights. But as long as the highlights are not blown you can always darken portions of the image during the raw conversion without doing any harm.

What is special about LV 15? In broad daylight (full sunlight with distinct shadows) LV 15 makes it almost impossible to blow the digital highlights with a modern camera. All of the whitest subjects will record below the raw threshold and even below the JPEG limit. Only specular highlights reflecting the sun will be over the limit.

The only natural situation where you might need to watch for highlight warnings is with snow or water where the sun is in front of the camera. The sun's reflection in these cases can be a mass of specular highlights.

There are lots of times where you might have trouble using auto exposure – light objects with a dark background, dark objects with a bright background, moving subjects, flying birds, racing cars, moving people – at LV 15 all of these get exposed without blowing highlights. There is enough exposure in the shadows that you can recover the details during the raw conversion if you want to.

The rest of the image that is lit by direct sunlight will have a normal range of tonality. Parts of the image that are in open shade will receive only skylight – one eighth as much as direct sunlight, 3 stops darker.

The main benefit is that you can set your camera to full Manual and use LV 15 for all broad daylight conditions that include very white elements. You will not need to look at your histogram, check for blinkies or worry about your camera's meter reading or its metering mode.

If your main subject happens to be something white in direct sunlight, LV 15 may be all you need. The rest of the image might look normal or dark but you can probably deal with the shadows separately.

The sun is always shining somewhere. Even if your main subject is not white, there may be some clouds or other white objects in the background that you don't want to have blown out.

But if there is nothing white in direct sunlight you might want to lower the LV. For example:

Condition	**LV**
Hazy sunlight (soft shadows) or no bright white objects in the scene	14
Cloudy bright (no shadows) or a scene with a narrow range of brightness	13
Heavy overcast	12
Areas in open shade lit by a clear sky	12

There are many other common situations described in Exposure Value in the section titled **Tabulated exposure values.** The table shows EV_{100} levels because they apply to ISO 100. They are the same as LV at any ISO.